

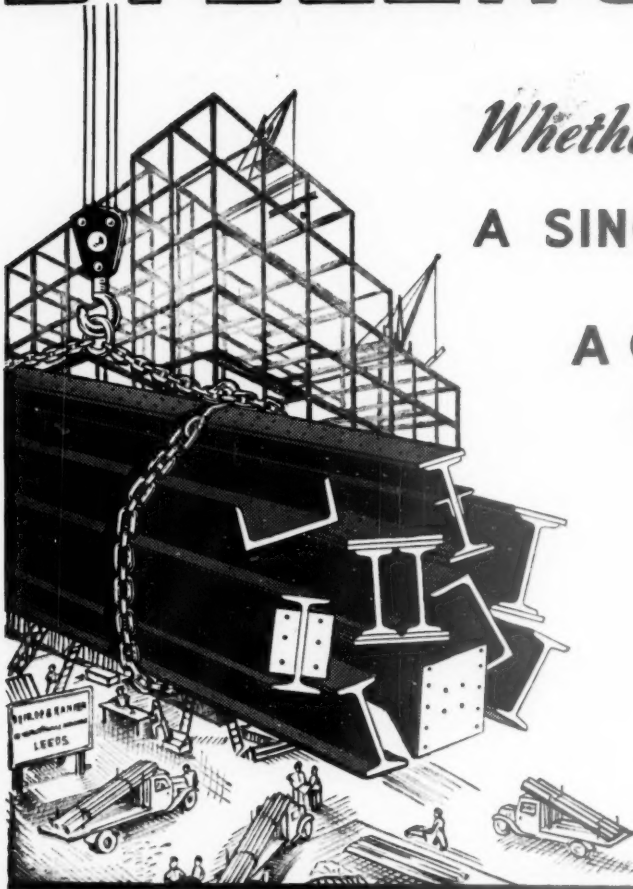
THE  
ARCHITECT  
& BUILDING NEWS

Building Exhibition Review

NOVEMBER 22, 1951 · VOL. 200 · NO. 4327 · ONE SHILLING WEEKLY

THE ARCHITECT and Building News, November 22, 1951

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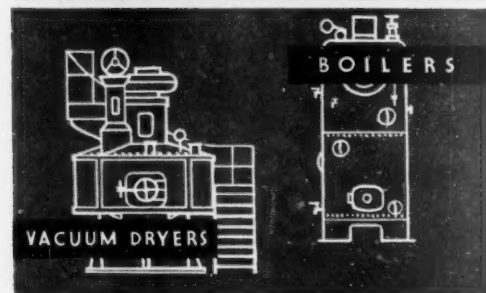
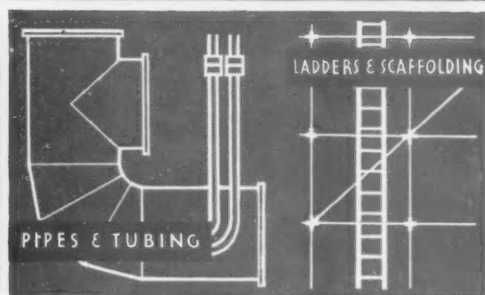
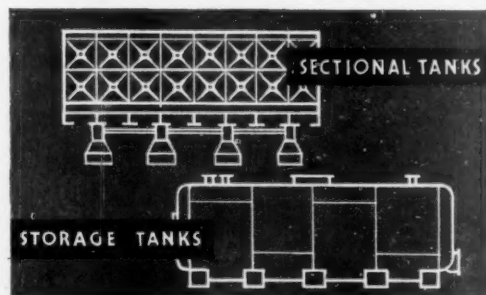
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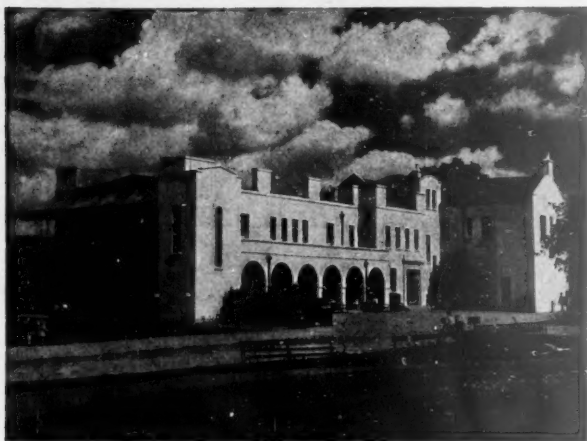
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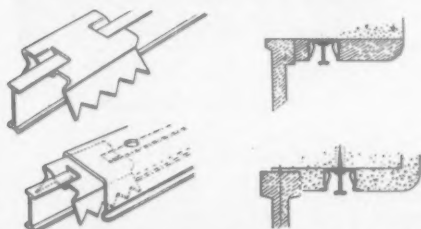


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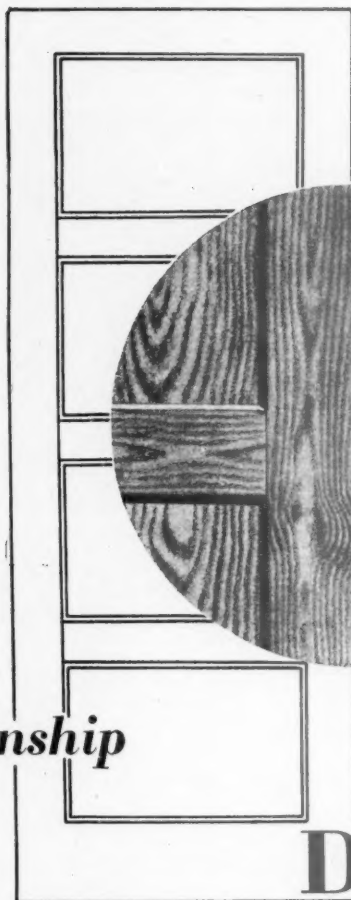
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**FIG 1**

**FIG 2**

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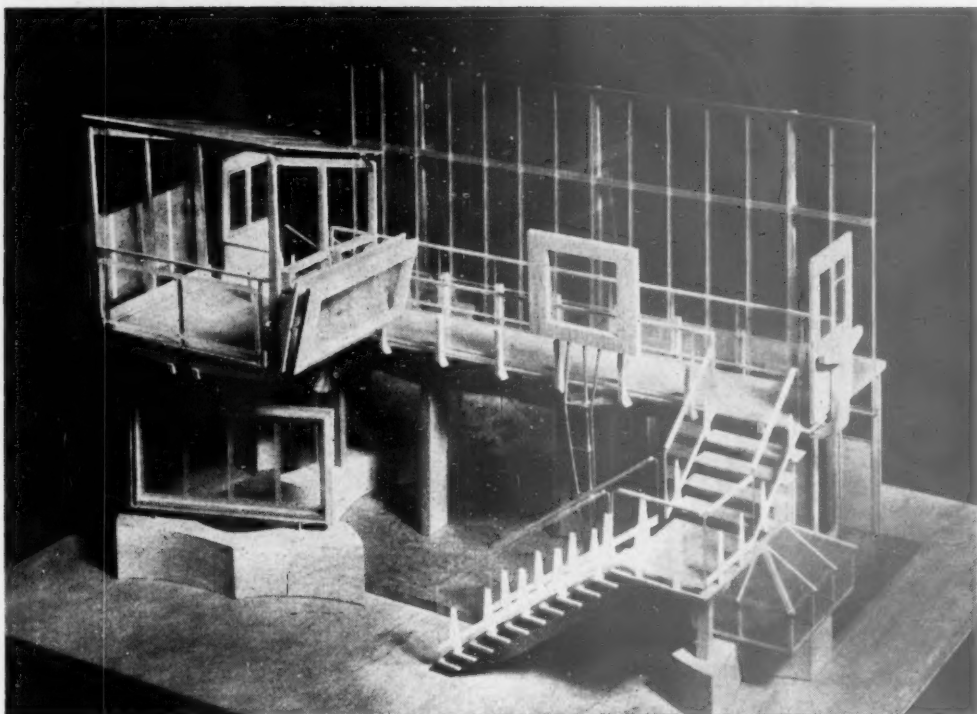
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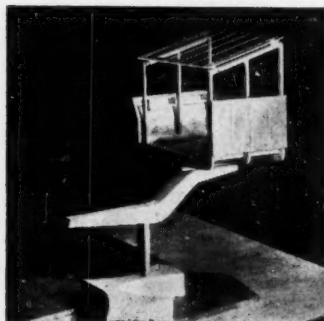
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## WILLIAMS & WILLIAMS AT THE BUILDING EXHIBITION 1951

The Williams & Williams stand is one of the most noteworthy design features of this year's Building Exhibition. Its use of two simple cantilevers to carry the upper floor is dramatic in solving one perennial problem of exhibition stand design, the difficulty of keeping the stand open and clear for exhibits. Another striking feature is the use of wood for the structure as a foil to the metal products of Williams & Williams.



The stand is fundamentally simple. It consists of three basic elements:

- 1 A thirty foot single laminated timber cantilever which supports the main gangway on the upper floor. (Photograph on upper right.)
- 2 A shorter cross cantilever supporting the office (photograph on left).
- 3 A wall of glass of double glazed Aluminex Patent Glazing (photograph on lower right).

The main cantilever is mounted on a pillar and braced at one end by a tension cable. It carries the gangway which is both the upper floor and the access to the office, which projects upwards and outwards on its own cantilever, reached by a staircase from the gangway. Thus the

only obstructions on the ground floor are the two cantilever supports and the staircases leading to the upper floor. This accentuates the 'open' feeling of the stand.

The Aluminex wall forms an effective screen to the back of the stand.

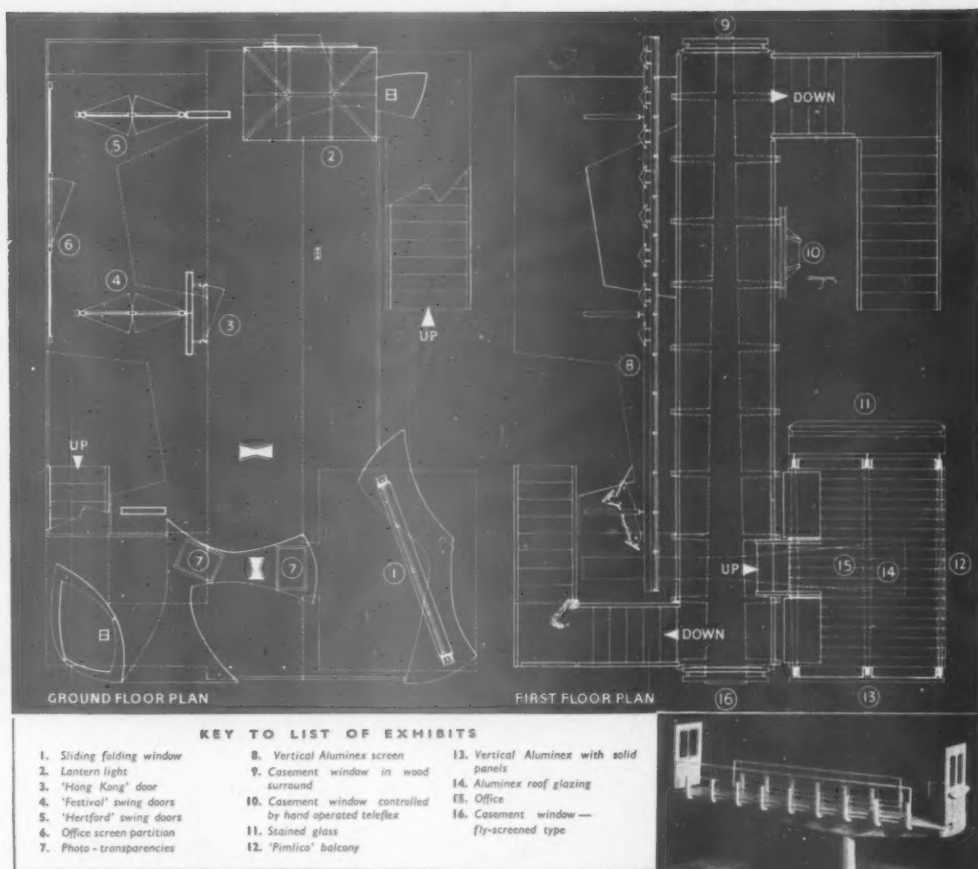
### Teleflex Midget Window Gearing

This midget gearing, a new development of the famous Teleflex gear, is specially designed for light small installations. Although primarily intended for single opening lights, two or more lights can be operated from a single point. On the stand the Midget gearing uses a hand lever on the ground floor to operate a small domestic type window on the upper floor. Gearing of this type operated the Metal Window Association exhibit at the South Bank where it was calculated that it stood up to 1,100 years of normal wear.

### Exhibits on the Ground Floor

Products of the Roften Division of Williams & Williams are the main features of the ground floor. Double action swing doors, as used in the Transport Pavilion on the South Bank, are admirably set off by plain





internal office doors set in a pressed steel door frame. Double action aluminium swing doors, as used in the Hertfordshire schools, are shown as well as steel four leaf sliding and folding school type windows. Another interesting exhibit is an Aluminex Lantern Light glazed with  $\frac{1}{4}$ " polished plate glass to provide an interesting display of models of past Building Exhibition stands used by Williams & Williams, which have had such an impact on contemporary architectural thought. On this floor are illuminated photo murals of the Pimlico Tower and the Transport Pavilion; both of which bear evidence of the versatility of the Williams & Williams organization.

#### The First Floor

The first floor is reached by staircases produced in Williams & Williams factories. There are four main exhibits:—

1 Standard steel domestic type window with leaded lights fitted to a standard wooden frame.

2 Standard steel domestic type window with a top hung opening vent operated by gear from the ground floor, housed in a standard steel sub frame surround.

3 Standard steel domestic type window fitted with both copper gauze and nylon fly screens and controlled by means of 'Roto' through screen operators fixed at cill.

4 Aluminex vertical wall glazing incorporating top continuous hung opening lights, one operated electrically and one manually from the ground floor.

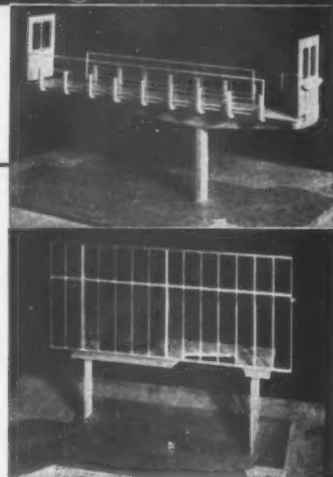
On this floor also there is the stained glass window designed by Kenneth New of the Royal College of Art, and executed by Williams & Williams.

Aluminex roof and vertical glazing, lantern lights and dome lights were used in the Sectional Factories in the Mark Hall Estate, Harlow, featured on page 597 of this magazine.

#### ROW 'D' STAND No. 83

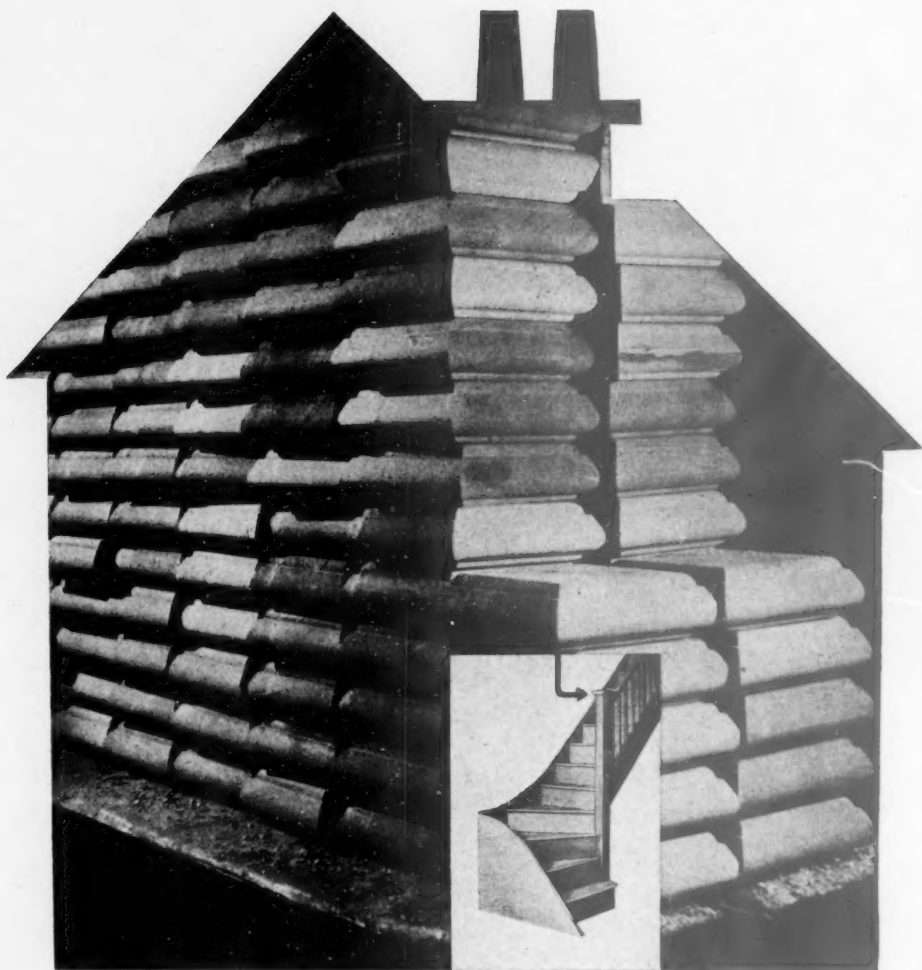
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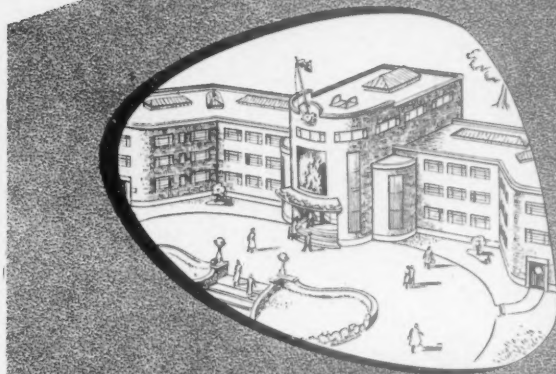
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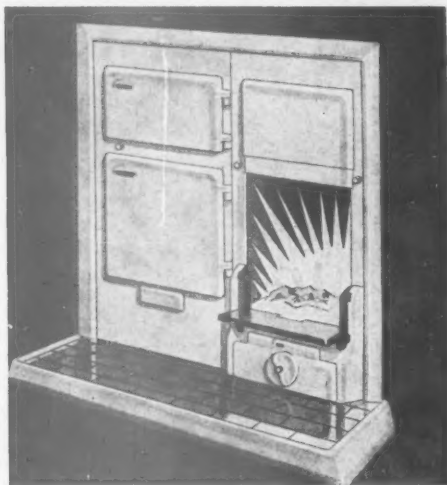
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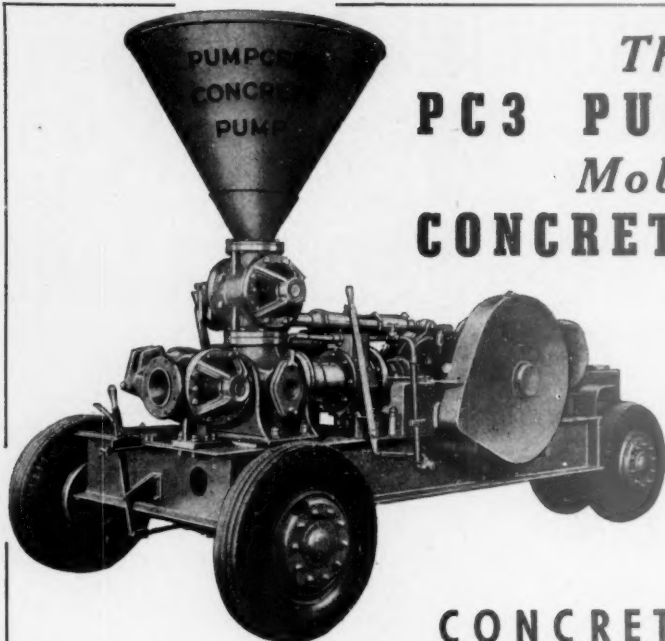
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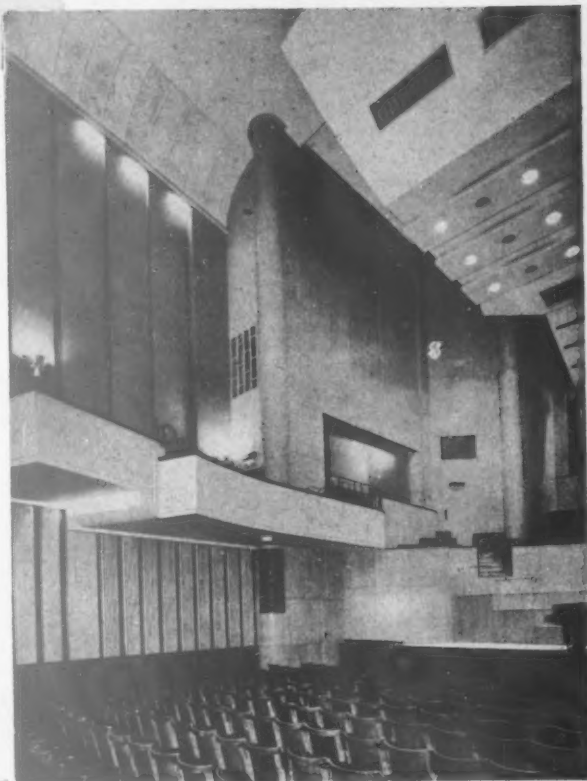
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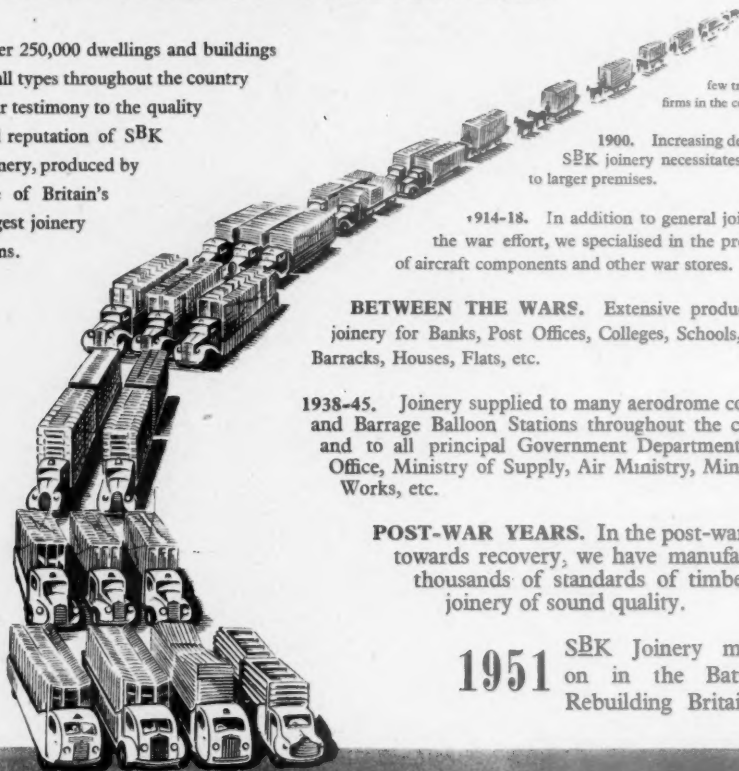
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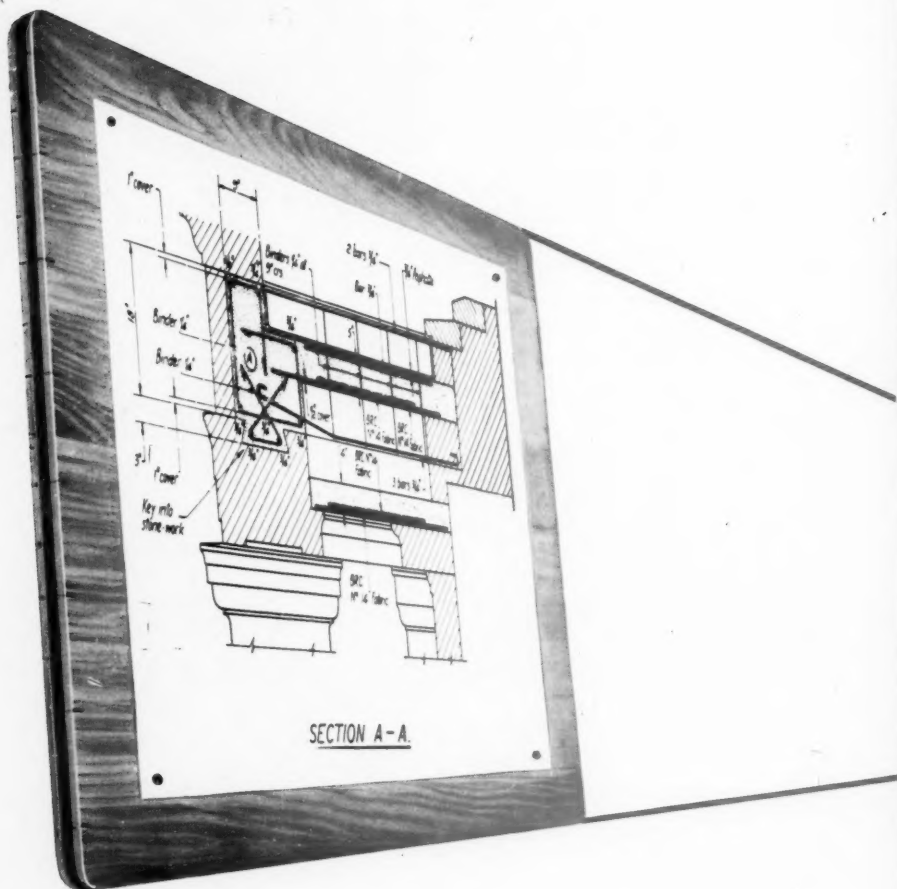
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Vol. 200. No. 4327

THE  
**ARCHITECT**  
& BUILDING NEWS

November 22, 1951

The "Architect and Building News" incorporates the "Architect," founded in 1869, and the "Building News," founded in 1854. The annual subscription, inland and overseas, is £2 15s. 0d. post paid; U.S.A. and Canada \$9.00. Published by ILLIFFE & SONS LTD., DORSET HOUSE, STAMFORD STREET, LONDON, S.E.1. Telephone: WATERLOO 3333 (50 lines). Telegrams: "ARCHITONIA, SEDIST, LONDON."

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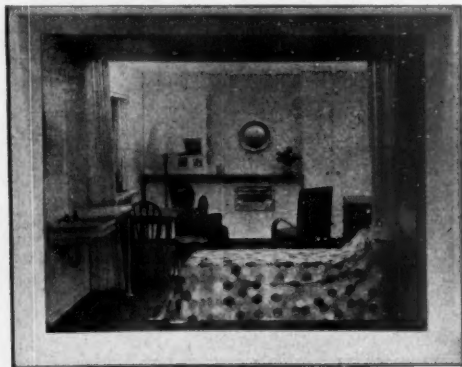
The Building Exhibition on opening day before the crowd arrived. The Exhibition closes on November 28

# EVENTS AND COMMENTS

## SYMPOSIUM ON COLLEGES FOR FURTHER EDUCATION

The second one-day symposium to be organized by the A.A. was held on 14 November. The subject was Colleges for Further Education, this, Sir John Maud, permanent secretary of the M.O.E. pointed out in a closing address, should have been Colleges of Further Education. Some distinguished people gave papers and answered questions from the administrators', educationalists' and architects' points of view. Outstanding contributions were made by Lieut.-General Sir Ronald Weeks, Chairman of Vickers, Dr. Venables, principal of the Royal Technical College, Salford, and Sir John Maud, who, at the end of a long day had the audience sitting on the edges of their chairs. Apart from the expected pleas for consultation between everyone concerned at all stages in the production of such buildings some other very important points were made during the day. Colleges should be sited where they can take their place in the architectural setting of the city. They must be planned so that they inspire a corporate feeling among the students. They must be arranged so that they give background education apart from the specialized technical education provided in each section. At the same time planning must be flexible and costs kept within the prescribed limits. Just how all the often contradictory requirements are to be met is the problem of the architect. To add to the normal problems I detected a very strong streak of personal opinion among the college and departmental principals who spoke. They said themselves that no two educationalists ever agreed. The task of solving this interesting and difficult problem was described to the architects present as one more challenge to their skill and ingenuity. Speaking of the recent additions to Harvard University, Sir John Maud quoted a graduate of that University as having described the stainless steel sculpture in the middle of the lawn as

"Of all the ideas of Professor Gropius, The Cosmic Hatstand is the dopiest."



Ministry of Housing & Local Government exhibit. Model of a bed-sitting room for an elderly woman furnished with some of her own possessions. 140 sq. ft., one of the units in Hostel for elderly people.

The awkward after-lunch period was neatly dealt with by a film show which included "Building a Building," starring Mickey Mouse. A successful day closed with further discussion and loud and prolonged beers in the members' rooms.

## THE BUILDING EXHIBITION

Absenting myself temporarily from the symposium I rushed to Olympia and arrived just in time to hear the closing bars of the Minister's speech, the whole of which made a most favourable impression. The industry liked the instruction that it must expand, but on second thoughts the snag appeared that to do so it must have more coal, and there we are back at the root of the trouble again. At the buffet I found one of the more substantial members of the industry laying in a good supply of starchy foodstuffs. He explained that he had just been told to expand and that this seemed to be the quickest way of carrying out his instructions. The opening of the Building Exhibition is one of the few occasions when all



Stonemasonry Exhibit in the National Hall Gallery

branches of the industry can be seen together and in large numbers. They make a very friendly gathering. For those who prefer to do this sort of thing dressed up there is an admirable opportunity at the A.B.S. Ball to be held at the Dorchester on 12 December. Tickets still available at two guineas each from Miss Solly at the R.I.B.A. After lunch, and before returning to Bedford Square I had a hurried first look at the exhibition and although I saw nothing to take the place of the 1949 Lafarge stand—and what a come down this year's is—I thought that there were numbers of goodish stands with a horror here and there. The grouping of stands according to products is, I think, a little better although quite a number of firms have insisted on having their usual sites, and some even their usual stands. The general level of display is good and generally speaking the framework in which goods are displayed does not distract the eye. Some stands still have far too much to read on them. I do not believe that the average exhibition-goer, especially after his experience at the South Bank, reads captions when he can see with his eyes, and ask questions if he wants to. In this respect I commend the Critall Manufacturing Co.'s stand which was designed by a group of A.A. students—



Apprentices at work at the stand sponsored by the L.M.B.A. in the National Hall Gallery.

curiously hiding their names behind the letter E—as the result of a competition held in the school and sponsored by the company. I give this stand first prize in the exhibition. It shows windows admirably, has plenty of circulation space, and no nonsense, and the designers have had the courage to do without the fashionable exotic indoor plants and to use instead two patches of something more ordinary. I did not see a caption on the stand. The structure is a space frame of R.S.J.s with simple panels and plain colours. It scores by its simplicity and complete lack of exhibition designer's nonsense. A number of other stands also show their products extremely well, notably Eastwoods, designed by Eastwick Field and Stillman and Chance Bros. by Paul Boissevain, M.S.I.A. Other designers have succeeded in showing products without bringing any life into their displays. Many stands have the tubular steel space frame type of construction started, I believe, some four years ago by Casson for Tube Investments at the B.I.F. While congratulating the Expanded Metal Co. on their break-away from their usual type of structure, I think that new stand is a little over crowded. Douglas Stephen and Co. have contrived several excellent effects but, seen altogether, the stand is a little confusing. Williams and Williams, who with Arcon as their architects can usually be relied upon to provide something interesting have, this year, a stand composed of mysteriously shaped laminated members balanced on or strapped to each other, I was so taken up with wondering what it was all about that I paid no attention to the exhibits. Twiststeel, whose stand was designed by Noel Moffett, A.R.I.B.A., have raised themselves about four feet above their neighbours and unless you go on to their stand you see very little more than trouser turn-ups at eye-level. Rather lower platforms are now very popular so are Swedish plants. Some designers seem to think that with these two clichés there is no need for anything more. Stand furniture is mostly Scandinavian and Race's virtual monopoly

seems to have been broken. The E.S.A. stand designed by James W. Lennard, F.S.I.A., shows some high-class joinery and I was surprised to discover that this firm makes furniture other than for schools. The counter on the stand is a nice job and its sliding doors are fitted with a neat device enabling them to be removed easily. The new Agamatic boiler is a break with normal AGA design, which although in my opinion not up to the Swedish firms examples, has been consistently good. The new one would pass at a glance for a washing machine or a refrigerator. Passing one stand my attention was drawn to a pretty woman wearing a monstrous black hat laden with enormous artificial roses. No one seemed to be taking much notice of her and I realized that she was the embodiment of the firm's trade mark. I wonder what increase in sales that idea will bring them?

Carter's tiles provide one of the only outstanding developments in the exhibition. Their display designed by Yorke, Rosenberg and Mardall consists of a number of large walls of hand-painted glazed tiles designed by Peggy Angus. Several varieties are shown all with simple patterns. The effects are exhilarating and I predict great popularity among those who are not afraid of a splash of colour and pattern.

It is difficult to know what to say about the Ministries' stands, they are large, comprehensive and well arranged. To look at them all properly would take hours. To throw them a passing glance is hardly fair considering the work that has been put into them.

Is anyone likely to learn lessons from looking at the exhibits? If they cause people to buy government publications on building and to read them the sponsors will presumably be satisfied, but could this result be obtained with a less elaborate display? There is no doubt that the passing crowd takes a great interest in these exhibits or at least in those which include models, but you do not see many people studying plans or captions. The M.o.W. has a large stand on the ground floor and the others occupy the whole of a short side of the gallery in the Grand Hall.

It was good to see young stone-masons at work in the gallery of the National Hall, one of my photographs shows them wearing paper hats although these were not in evidence when I was there. Nearby there is a large masonry exhibit designed by Lawrence Wright, M.A., B.Arch., A.R.I.B.A. Further on, building trade apprentices can be seen at work in a variety of trades. I was impressed with their industry and their lack of interest in the spectators. Unlike some of the work on show from schools of building the apprentices work was of practical design likely to be encountered by anyone in the building trade. I was pleased to see real public interest in the boys' work. I have often drawn attention to the very low standard of design of the work carried out in most trades in building schools. It is a pity that those schools which include departments of architecture do not ask the architects' staff or students to design the details for the building students to make. On the apprentices' stand I saw some well-designed and made pieces of furniture. I thought, however, that the bowl of illuminated glass tulips might have been omitted.

I am sure it is difficult to know what to do with spaces left over in the gallery but I think it is a mistake to hang a bunch of academy architectural drawings in a large

alcove furnished with two lonely armchairs. The lettering above this alcove has to be seen to be believed for not only is it very large but of a most debased design as well; and here I remember that two years ago there was a stand devoted to fine lettering. Nearby there is a large model of a haunted grange, it looks lonely and out of place. Two firms have provided staircases from ground to first floor and although neither of them is very beautiful they are both convenient and by using them one can avoid those dreary and blinkered stairs in which Olympia abounds.

I shall be visiting the exhibition again, and next week, will finish my remarks with suggestions to the management

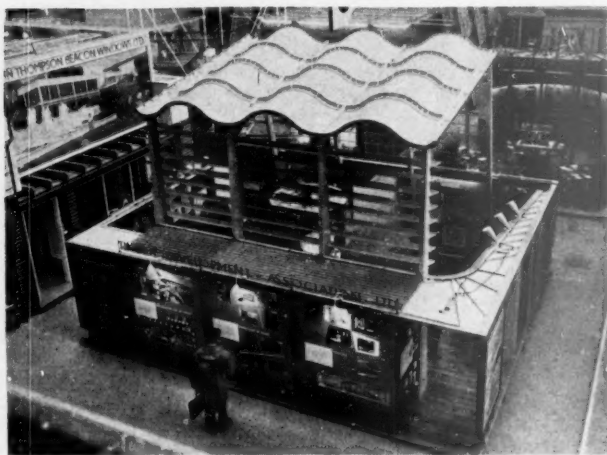
for consideration for the 1953 show. Looking back to my notes on the 1949 exhibition I see that none of my suggestions has been adopted and this encourages me to persevere.

#### COVENTRY CATHEDRAL

The newspaper reports of Mr. Basil Spence's appearance before the Coventry Diocesan Conference at Leamington recently make it appear to have been something of a trial by ordeal. Mr. Spence, however, was in complete command and showed that he had prepared his case as carefully as he prepared his beautiful drawings.

ABNER

## NEWS OF THE WEEK



Looking down on the T.D.A. Stand at Olympia.

#### Mr. E. A. A. Rowse

The Board of Management of the School of Planning and Research for Regional Development is pleased to announce that, owing to an unforeseen change of personal circumstances, Mr. E. A. A. Rowse has now found it possible to withdraw his resignation as Principal of the School, and to postpone his retirement for the time being.

#### Honan Scholarship

Mr. K. L. Bartlett, Southworth Rd., Newton-le-Willows, Lancs, has won the Liverpool Architectural Society's "Honan" Scholarship for 1951 open to all members of the society under 30 years of age.

There were 13 entrants, and the result was announced at the last meeting of the society by Mr. F. J. M. Ormrod, the president.

The scholarship is worth £50 and entitles the winner to travel abroad, after which he is expected to submit a paper to the society.

#### COMING EVENTS

##### Royal Institute of British Architects.

Nov. 27, 6 p.m. Talk by Eric L. Bird, M.B.E., M.C., A.R.I.B.A., on "Fire Protection: The Architect's Responsibility," at 66, Portland Place, W.1.

##### The Architectural Association.

Nov. 28, 8 p.m. Ordinary General Meeting. Talk on "Holiday in Sweden" by Mr. Gontran Goulden, T.D., A.R.I.B.A., at 36, Bedford Square, W.C.1.

##### Town and Country Planning Association.

Nov. 29, 6.15 p.m. Talk by L. E. White, Vice-Chairman St. Pauls Cray Community Association, on "Junk Playgrounds," at 28, King St., W.C.2.

##### Housing Centre.

November 27, at 5.30. "Report of the Royal Institution of Chartered Surveyors on Rent Restriction" (speaker: C. H. Walker) and "Rent Control" (speaker: Francis Beaufort-Palmer).



Top Dog Men's Wear Production Centre, at Deewhy, Australia, which has been awarded the Sir John Sulman Medal for Architecture for Commercial buildings completed during the 3 years ended December 31st 1950.



## IN PARLIAMENT

New Housing Minister's  
Call for Crusade

The new Minister of Housing and Local Government, Mr. Harold Macmillan, gave a vigorous account to the House of Commons on November 13 of his hopes and intentions. He sought to evoke the spirit of a new housing crusade, measured the material shortages frankly, spoke of the need for resourcefulness and ingenuity on the scale of 1940, and readily admitted that the target of 300,000 houses was unlikely to be realized in 1952. He began with an engaging candour by a reference to "government by amateurs advised by experts," admitting that he had had no previous experience of his present tasks but claiming as an advantage that if he had little knowledge he also had no prejudices, and suggesting that in some respects the clean slate might be better than a closed mind.

Mr. Macmillan said that of all the social services the most important was the provision of homes. Housing made not a party but a universal appeal. There might be differences of approach, of method, and of policy, but he could not think there was any difference of purpose. He expected criticism from M.P.s, but he also relied on their co-operation.

Among the grievous cuts that had to be made the Chancellor of the Exchequer had done everything possible to safeguard the housing programme. It had been decided that the local authorities should borrow from the Government at appropriate market rates. Any other course involved a hidden subsidy. What remedy could be applied to prevent undue pressure in the cost of housing as a result was to be discussed with the local authorities, and the periodic review of the housing subsidies had been advanced six months to facilitate this.

There were vital exceptions to the broad decision that starting dates for all new building projects were to be held in abeyance for three months and those already granted reviewed. Individual projects exceptionally urgent in the national interest would be excepted, and the housing programme would be excepted altogether. It would be left to those in charge of the housing programme to operate the existing machinery. Since housing covered a large number of small projects, it was obvious that the flow must be arranged to give the best continuity of production. They stood rather to gain than to lose from the general standstill, for a standstill on other building would be—or might be—of corresponding benefit to the number of houses completed month by month. It was towards an increase in those figures that they would press forward with all their concerted efforts.

On the private ownership of houses, the Government's intention was that their housing policy would, as declared in the

King's Speech, have regard to the desire of many people to own their own homes. Since it was part of their philosophy that a wide distribution of property rather than its concentration made for a sound community, they would pursue this aim wherever it was appropriate and could be done with due regard to the interests of those who needed to live in rented houses. He hoped soon to give local authorities guidance on the building of new houses for sale and on the sale of existing houses. In all this he did not believe in compulsion; much could be done by co-operation and encouragement, for they must not seek a uniform or rigid solution to a complex problem.

The circular issued to local authorities last spring (38/51) suggested that within the so-called Dudley formula house designs could be produced which would maintain essential standards within a smaller total superficial area. Mr. Dalton was the pioneer of simplification, and he (Mr. Macmillan) was following the example. He was hoping that the ingenuity of his advisers and of the local authorities would be able to achieve the main purpose—to get the maximum result, in terms of good houses, out of the labour and materials available. He was studying all aspects of this, and hoped soon to make a decision. They were working on plans—which Mr. Dalton had started—to see how, by ingenuity, the essential standards of space in living and sleeping rooms laid down in the circular could be maintained and yet simplicity achieved.

The Government's target remained 300,000 houses a year. It was admitted that this was possible if all other projects could be put on one side. But of course they could not: new towns and new estates must have their essential services; building work for defence and essential industry must be done as far as resources allowed; there was also the problem of balance between housing and other services, such as schools. Since 1945, the highest number of completed houses reached had been 246,000 in 1948. Last year the figure was 198,000. The rate of completion to-day was running at about 190,000—the lowest for four years.

Turning to materials, he said that to reach the final target proposed would mean an increase in brick production of at least one-third, and with the needs of rearmament perhaps more. In cement there must be either reduction in exports, saving in use, or increase in production. Supplies of plaster board were inadequate. Delivery dates of cast-iron pipes were in some cases 24 months ahead. The Chancellor had promised to maintain softwood consumption at the present level, but for more houses either imports must be increased or great advances must be made in saving in the use of softwood for all purposes. The Ministry was therefore faced with the same difficulties that others had found in coal and food. They had known of some of them, but they did not know the worst of them.

The question had been asked: when would the Government reach their target? It would not be in 1951; nor, he feared in 1952, though he believed they could make substantial progress in that year. It would be their first task to press on with all that was now arranged, and to make as far as they were able more ambitious plans for 1953 and succeeding years. How far they would succeed depended on many things not within their control—the foreign sky might grow lighter, or might darken. But if they could, subject to the over-riding needs of

defence, create throughout the whole country the spirit of a housing crusade, if they could get from everyone concerned the support which the country expected, and deserved, then he believed that they might cherish great hopes.

People said it could not be done. How he hated those words. If they had said it in 1940 they would not to-day be sitting there as members of a free Parliament. It would need skill, ingenuity, contrivance and determination to get the greatest possible results out of the resources that were or could be made available. It would need the co-operation of all Departments, the effort of all parties in the Government, and the spirit of comradeship and partnership on which they must rely in this and all other tasks.

## Licence-Free Work

The Minister of Works, Mr. Eccles, was asked by Mr. Chetwynd whether he would reduce the amount of licence-free building work, and thereby provide additional labour for the building of new houses. Mr. Eccles refused, stating that he did not consider such a reduction would make any appreciable difference to the building of new houses or would justify the extra work on staff and burden on the public. (Nov. 13.)

Mr. Dods asked the Chancellor of the Exchequer to what extent he proposed to cut building construction work other than housing; and what priority was to be given to factories, schools, public amenities and renovations or readjustments of older buildings. Mr. R. A. Butler stated that decisions on these matters would emerge from the review of the building programme which was being undertaken. (Nov. 15.)

## Registration Case

James H. Burlow, carrying on business under the name of D. Wilson & Partners, Buchanan Buildings, 24, Holborn, E.C.1, was convicted by Alderman Sir Bracewell Smith at Guildhall on Thursday, November 15, and fined £20 with £5 5s costs, at the instance of the Architects' Registration Council, for carrying on business under the title of "Architect," not being registered under the Architects' Registration Acts.

It was proved in evidence that the defendant was the sole proprietor of the business and the words "Architects and Surveyors" appeared both on his letter-paper and in several places on the doors leading to his premises.

Defendant's counsel, Mr. Gilbert Rountree, unsuccessfully pleaded Section 17 of the Architects' Registration Act, 1931, relying on the employment by the defendant of an architectural superintendent in charge of his architectural work. The defendant stated in evidence that he had an agreement with his consultant architect, Mr. Alfred E. Nightingale, aged 75, who was resident at Herne Bay and attended at defendant's office as and when required, some four or five times a year.

Counsel for the prosecution, Mr. Maurice Ahern, pointed out that in order to satisfy the conditions of Section 17 the business must be owned by a firm of two or more persons and that the Section did not apply in the case of a one-man business.



## Proposed Primary School, Orpington

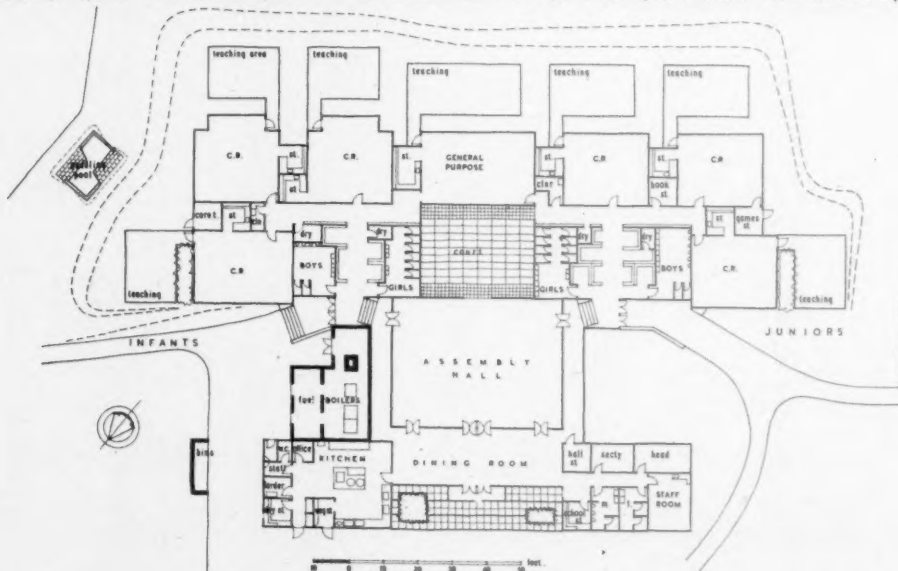
architects: CABLE & PITE, F.A.R.I.B.A.

in collaboration with S. F. LOWETH, F.R.I.B.A., County Architect, Kent

**T**HE school will be a one-form-entry junior mixed and infant school of 280 places. The site of about 5 acres is generally shielded by trees with an open space in the centre and strips of trees and shrubs down three sides. The ground rises in a moderate gradient from the north boundary.

The compact planning of the building leaves the greater part of the site clear for playing fields, etc., whilst natural features are preserved. The total area of the building is 13,115 sq ft including boiler house, giving 46.84 sq ft per place.

The construction will be almost entirely prefabricated, using Holoplast as a weight-bearing material throughout. The plan is based upon a 4ft 2in module, the size of the prefabricated panels. The panels will be self-finished and assembled complete with windows and doors; externally colours will be a deep terracotta or a light buff. The roof structure will be extruded aluminium sections covered with Stramit panels and roofing felt. The Assembly Hall will have steel columns and lattice girders. A universal ceiling height of 8ft is used except in the Assembly Hall which rises to 16ft. Apart from the boiler house (Stock brickwork) and concrete foundation raft, the whole of the construction will be assembled dry.





# Impressions of Olympia & Chicago

by LEONARD ELLIOTT

THE previous building exhibition I attended was in the U.S.A. less than a year ago and it is interesting to compare that show with the present exhibition at Olympia. Two of the largest hotels in Chicago were booked for the occasion and one was conscious of a tremendous feeling of excitement about the achievements of the American building industry.

The builders were there in force; they looked very pleased with life and had reason to be. In a country unfettered with controls everyone had an opportunity to build and the quicker they built the more clients they had and the more money they hoped to make. It was not surprising then that practically the whole exhibition was devoted to ways of building quickly, cheaply, and in this strictly competitive country, to entice the would-be home-owner either by quality in building or more often by substitutes such as built-in television, the latest refrigerators, cookers or even centrally heated dog kennels.

Yes these builders had "never had it so good" and they were the heroes of this exhibition. Every now and again the microphone would announce yet another builder having completed his so many hundredth house that year and everyone cheered. The centre of the main hall looked like a flower show rather than a building exhibition complete with "five star" American beauties who would present the successful builders with sprays of orchids and pin them to their expansive chests. The first recipients blushed a little but by the end of the day almost every builder present was wearing orchids.

For the ears of the organizers of our own exhibition here are a few special points. No tickets were issued as on arrival you merely presented your credentials and the back of your hand was stamped with a rubber stamp. As this produced no visible sign on my hand I wondered whether American efficiency had broken down but when entering the main exhibition halls my hand was placed under an ultra-violet lamp and glowed "Building Congress admission approved." For the whole of the three days I could wander in and out providing I placed my hand under the lamp. It did not seem to dim at the end of the Congress and for all I know (not possessing a suitable lamp) I may be permanently tattooed. On the way in one was presented with a very large and strong paper envelope or carrier bag and at each stand one merely presented this and literature was placed in it. It did have the slight disadvantage that after a time one was conscious of a large weight, but the simplest way was to collect a ready filled bag on the way out. Another feature was to have nation wide competitions either for actual designs for houses or for methods of buildings. Results were announced at the congress amid parties and the prizes were pretty good by our standards. Most of the exhibitors gave records of actual production and costs and complete specifications of their products. They also made great play of overall savings by using a product or appliance. If, for example, one used a thinner but more expensive floor the savings in floor height would be exploited to show that the product would save costs in the long run. Many materials were shown with actual mock-ups to show uses, together with plans of actual buildings using the material. Statements such as "Million dollar apartment project uses so many thousand square feet of lightweight partitions—saves so much steel framework and foundations." "Faster, easier application cuts cladding costs." "Clear span



Caricature by "Poll" in the  
L.M.B.A. Club at the Building  
Exhibition, Olympia.

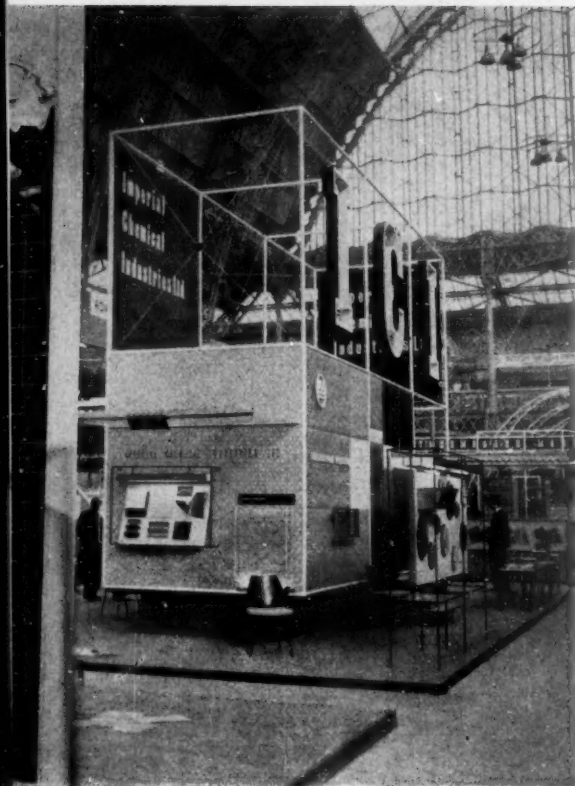
trussed roofs cut out load bearing internal partitions" to quote but a few show the trend to speed building and reduce costs. Many stands had building operatives in attendance to demonstrate and to give the practical "know how." And, of course, a large part of the exhibition was devoted to innumerable types of power tools and gadgets such as simple jigs for the assembly of timber roof trusses and setting out of brickwork. Metal trim for skirtings and architraves incorporating conduit runs and complete with socket outlets and switches and a wide variety of plastic finishes for kitchens and bathrooms.

And now for Olympia; first it must be said that the exhibition is much larger than the one I have been describing although not nearly so full of ideas, and secondly, the air of excitement and achievement was sadly lacking. Surely we do not want an enlarged version of the Building Centre but a live exhibition combined with conferences on various aspects of building construction and suitable social events to bring together all sides of the industry.

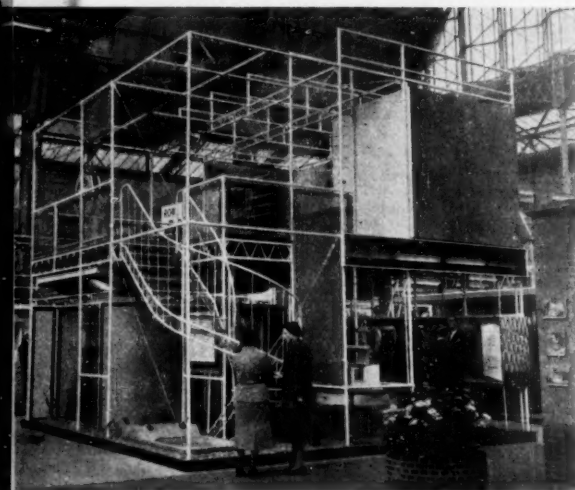
As for the stands themselves they do not seem to be presented dramatically enough chiefly because there is too much general lighting. One of the good points of the Dome of Discovery at the Festival of Britain was the effect produced by subdued lighting. Also the stands are not grouped as well as they might be with the exception of the stands devoted to machinery. It would be a great help to be able to compare the various ideas on floor finishes or metal windows without having to wander from one side of the hall to another.

There are, however, some excellent stands and these are generally those presenting a demonstration of the actual materials being displayed. The Crittall stand, for example, is based on a refined steel frame design to which is attached products of the company. It is a relief to find on this stand a new standard window known as the type E and made in 2ft wide units instead of 1ft 8in, giving more light area, better proportions, and of more robust construction.

The Williams and Williams stand, on the other hand, has chosen a construction of laminated timber cantilevers sup-



Stand for Imperial Chemical Industries, designed by Robin Day.  
Below: The stand for The Expanded Metal Co., designed by Douglas Stephen.



porting a floor on which the exhibits are shown. Among this firm's products are two items of interest, one a rotating handle for opening and fixing windows (this, incidentally, is fairly standard on metal windows in the U.S.A.), and a simple type of remote window gearing.

Another interesting stand is by Ruberoid, using a specialized system of scaffolding combined with full-size models and an actual floor to demonstrate the company's products.

The Cement Marketing Company's stand is the main exhibit of prestressed concrete. The floor of the stand is suspended from an outer framework and is composed of prestressed joists at close centres supporting an unreinforced floor deck. Not such a convincing demonstration of the value of this new material as the Ciment Fondu stand last time.

The I.C.I. stand is also extremely well done. Here a light space defining framework is used to suspend products such as corrugated "Perspex" and non-ferrous metals. Chance Brothers also use the same system to display various forms of glass and the Expanded Metal Co. show the full range of their products in a similar way. It seems to me to be a waste of valuable advertising space to create stands which are a form of shelter for the executives who pop out occasionally from their back rooms rather than to integrate the stand to act as a complete demonstration unit of the products.

A very successful exhibit which demonstrates this point well is the Metal Sections stand which shows the practical application of their open web steel joists with nailable wood inserts in the flanges, the use of their products known as nail-steel framing and a false ceiling construction known as "Difulite," which is made from continuous strips of aluminium to diffuse lighting. Also shown are aluminium blind lath, curtain wall construction, metal skirtings and picture rails and a range of cold formed steel sections.

In a similar manner Gardiner and Sons show a skeleton form of their "Thermagard" Mark III school, showing the use of standard frameworks and infilling materials.

The various Government departments so intimately tied to the building industry to-day seem to be taking a more practical approach to spread various non-political ideas. The D.S.I.R. has an exhibit in aerated concrete. The film display starts by involving the housewife with a cookery demonstration on aerating sponge cakes and as some lightweight concretes are produced by blowing up the cement with stabilized foam like a stiff white of egg this approach is convincing to the layman. We are always being told that this product is greatly in use in Scandinavian countries but the Swedes reinforce their lightweight concrete to form roof beams which span reasonable distances and do both jobs of looking after the structure and insulation. It is amazing that similar factories have not yet been set up here. On one stand of the Ministry of Housing and Local Government we are confronted with the slogan "Skilful Design Lowers Costs" and the exhibits show examples of planning to show economies. This is a first-rate trend and the Ministries, through a technical advisory service, such as is starting in the Ministry of Works, should exploit this to the full. Let us have no more of expensive substitutes for scarce materials but a more realistic approach to giving builders and architects a technical service to show what can or cannot be done with new materials and methods. This system has been operating in the Ministry of Fuel and Power for a considerable time and their stand describes the services which are available to promote savings in fuel. They have claimed that economies of about 25 per cent are being achieved by promoted efficient use of fuel. Perhaps we may await the day



The Grand Hall, Olympia, taken from the gallery. The "A. & B. N." stand can be seen just below the row sign "H & G."

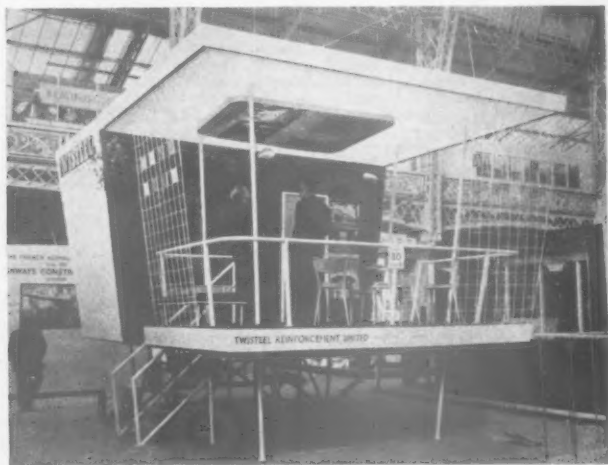
when the building industry can claim equal savings. This, I am sure, is possible by good design to speed construction and to use materials economically.

There is evidence in the exhibition that new ideas are on the way and they are backed by research to a much

greater degree than before the war. A releasing of trade restrictions with many European countries including Germany has helped a lot especially products from the Scandinavian countries. What we must aim for now is a balanced and continuous supply of components and materials before we can hope to build more quickly.

There is an extensive display of plant showing many new developments in mobile hoists, tower cranes, concrete mixers and weigh batching machines, shuttering equipment, scaffold units, tube and bar bending machines, earth moving equipment and various forms of power tools. Tower cranes have been in use on the continent and the U.S.A. for many years and it is surprising that they have taken so long to become acceptable here. The D.S.I.R. stand includes an exhibit on their use and this deserves study especially when one considers that about 8 to 12 per cent of building costs are concerned with moving earth or materials.

★ ★ ★



Stand for Twisteel Reinforcement Ltd., designed by W. Noel Moffett.

## THE BUILDING EXHIBITION

## WOODWORKING MACHINERY

a review  
of machines suitable for building contractors

IN the Empire Hall at Olympia have been arrayed many woodworking machinery exhibits to attract the attention of builders and contractors and possibly some architects. This year the machinery manufacturers can claim to be taking a major part in the exhibition, for they occupy about a quarter of the exhibition space and have on show about 3,000 machines, plus the extensive displays of saws, tools and accessories which go with the modern machine. From the large number of woodworking machines displayed it is evident the manufacturers look to the builder and contractor for much business, and many of the machines have been specially designed with the builder in mind.

It is interesting to notice how the different firms tackle this same problem. Any contractor buying a new machine will bear many factors in mind, placing the emphasis according to his own peculiar needs. He will want details of performance; ease of operation; rate of output; cost of running and maintaining the machine; probable working life; appearance; and initial cost. Some manufacturers have displayed machines built on austerity lines, giving reasonable performance at a low price; others have included the latest refinements and aimed at maximum output, putting the final cost of the machine way down the list of important features. Competition becomes keener in this field.

The plant described here has been chosen either because it is new to the market or because it may have a special application for the contractor.

At the stand of R. S. Brookman, Ltd., of Rothley, Leicester, there is introduced for the first time by the firm a self-feed multi-drill, which can work to almost any drilling pattern. With this machine small screw holes for a complete job can be drilled automatically at a single pass. The drills are air-driven, and once the power is turned on the drill feeds at a controlled speed. This is a machine designed almost solely on the basis that labour costs are the heaviest charge facing the contractor, and the value of the machine would depend upon the volume of work available for it. On the same stand are two boring machines, one a single-head cluster and the other a multi-head horizontal. Of interest to the builder is the mortiser, which can certainly work at a fast speed, and the hydraulic action eliminates much of the manual work associated with this operation.

There are no surprises on the stand

of Wilson Bros. (Leeds), Ltd., of Leeds, but the standard of their machinery is well maintained. A considerable demand has been made for the motorized model of their universal woodworker, especially the WTK model. This piece of equipment is able to cope with most of the wood-working jobs which have to be done in the contractor's shop. But there is some delay in the delivery of the machine. Other pieces on this stand which might attract the building trade visitor are the 20in x 9in surface planing and thicknessing machine, another model 24in x 9in with roller feed, a 12in planing and joining machine, a beltless single-ended tenoner, and a crosscut saw.

S. N. Bridges and Co., Ltd., of London, S.W.6, are showing two new machines; namely, a neatly designed orbital sander, and a portable electric router. The sander has a  $\frac{1}{2}$ -h.p. motor and weighs 10lb. The sanding pad of 7 $\frac{1}{2}$ in x 4 $\frac{1}{2}$ in describes 4,000 movements a minute to produce a fine finish, and its lightness makes it suitable for joinery work, while the router can do grooving, moulding, routing and rabbeting, using a spindle speed of 10,000 r.p.m. under full load. The router has been designed to give the operator full view of the work with a simple depth-of-cut adjustment. Here again the motor is  $\frac{1}{2}$ -h.p. with a full load current of 3.5 amps.

Attention at the stand of Thomas White and Sons, Ltd., of Paisley, must inevitably be drawn to their new straight line edger which has an infinitely variable feed. This means that the sawing is adjusted to the capacity of the operator. A pleasing machine, all the adjustments can be made easily by the operator, who can keep the chain constantly filled and so achieve economical sawing. Incidentally, the saw is mounted above the table. Other machines displayed, although not entirely new, reveal many improvements. There is the triple drum sander with its removable canvas rubber-faced belt, and ammeter control of each drum. A useful machine is the 18in crosscut, while the combined chain and hollow chisel mortising machine is valuable in joinery work.

With softwood selling at well over £100 a standard, a machine which cuts down wastage in timber cutting can be fairly sure of a welcome from the wood-consumer, and this has led to the development of the junior band resaw by Stenners of Tiverton, Ltd., which is being exhibited for the first time. It cuts down drastically on the waste factor customary in circular re-

saw plant by reducing saw-kerf wastage. At the same time there is high cutting speed with a relatively small motor of 20 h.p. for the main drive. Apart from this machine the trade might find of interest the sturdy Stenner circular saw bench, the vertical spindle moulder with its two speeds of 4,500 r.p.m. and 6,000 r.p.m., the interchangeable chain and chisel mortiser with a lift-off table which enables doors and frames to be mortised, and the dimension saw bench with a spindle which will cant to 45 deg and rise and fall.

On the stand of A. Cooksley and Co., Ltd., of London, E.C.2, there is a new type of rolling table sawbench which is particularly well suited to cutting large sheets. This machine was developed just before the opening of the exhibition, and it is likely to arouse a lot of interest at a time when boards play such a considerable part in building work. Their universal woodworker combines in one unit a 24in sawbench, 12in or 16in x 9in surface planer and thicknesser, and a vertical spindle moulder with accessories for tenoning, dovetailing, boring, slot and hollow chisel mortising and stair housing. The type of high-speed spindle moulder shown is not the best for the builder, his needs being better met by the heavy duty model, which is not on the stand. There are also useful models of sawbenches (from a 9in dimension bench to a 27in rise and fall table sawbench), a 16in x 9in surfacer and thicknesser, and sanders.

A wide range of machinery was to be found on the Interwood stand, this London firm having no fewer than 17 machines on view, though many of no direct interest to the building trade. Several machines are making their exhibition bow, though they have been shown abroad in most cases. Among the newcomers are an automatic moulding sander which will take cross-band mouldings from  $\frac{1}{2}$ in to 8in wide, with two feed rates giving production of 675ft and 1,200ft an hour; an automatic straight-line edger with patented endless chain for cutting boards of varying thicknesses; and a vertical and horizontal belt sander, with grinding bands a foot wide.

There are 13 exhibits on the stand of Thomas Robinson and Son, Ltd., Rochdale, including two which have not been shown in this country previously, though they were displayed in Canada earlier in the year. The two models concerned are a 24in x 9in medium-duty planer with cutterblock and feed driven from a single motor, and a hopper feed attachment for the



7in x 3in six-cutter moulder. There has been considerable modification of the 4in x 3in electric moulder since it was shown at the Building Exhibition last year. This machine has five rotary cutterheads, each fitted with an S.C.R. motor mounted directly on the cutter-spindle, with two spindle speeds (4,500 r.p.m. and 7,200 r.p.m.) and feed rates up to 90ft a minute.

There was a last-minute rush to get the new chain and chisel mortiser model to the stand of the Dominion Machinery Co., Ltd., of Hipperholme, Halifax. Other new machines on the stand included the tenoning machine with top and bottom scribers, tenoning blocks and cut-off saws; a surfacer and thicknesser; and a bench-type spindle moulder, which has been designed to be used in any odd spot and should be of value to the trade (it has a  $\frac{3}{4}$ -h.p. motor with a spindle speed of 10,000 r.p.m.).

Some of the equipment on the stand of John Pickles and Son (Engineers), Ltd., Hebden Bridge, Yorks, has no interest for the building trade, but there are several machines from their range which will interest the builder. The fully motorized automatic saw sharpener can deal with handsaws up to 8in wide, and it has the advantage of being able to sharpen the straight-cut tooth in most forms without any change of cam. For the large contractor the patent twin-stair trencher can be a most valuable asset, being capable of trenching a standard flight of stairs in less than four minutes without the troubles associated with pitch boards and marking out. Worth close inspection are this firm's continuous-feed glue jointer and the automatic finger-feed surface planer.

Several quality machines of high performance are to be found on the stand of Wadkin, Ltd., of Leicester. Some of the larger machines are not of direct interest to the building trade but many of the others will attract attention, such as the sturdy spindle moulders with a patent oil mist lubrication feature; a 20in jointer with totally enclosed drive, which obtains its rise and fall of the tables by mounting them on eccentric trunnions to ensure radial movement with the cutterblock; a double-headed universal grinder, with a grinding wheel at each end of the spindle; a straight knife grinder for re-grinding planer knives up to 36in long, with an arrangement which most usefully allows cant so that hollow grinding, as well as plain grinding, can be performed; a high-speed router; and useful crosscutting and trenching machines.

Many changes had to be made to the proposed stand for Danckaerts Woodworking Machinery, Ltd., London, N.1, but there are nevertheless several interesting features, including an entirely new 36in sectional feed thicknesser, fitted with infinitely variable feed gear and individual sets of feed rollers and pressure bars. Finish is good and good output figures are obtainable with a careful operator. Not previously ex-

hibited in this country by the firm are a 16in three-cutter planer and moulder, a 7in x 3in integrally motorized six-cutter and an oscillating belt and bobbin sander. Of British development is the model of a chain and chisel mortiser.

Turning to a smaller stand for a moment, the exhibit of Nufloor, Ltd., of London, E.9, might hold the interest of many in the building trade. The 8in sander is now an enclosed machine and the off-set drum allows surfacing right to the edge of the floor, which is a feature boosted by the firm, as they claim that even the American manufacturers of these machines have not developed such an improvement. The planing machine on show was not a production model, but it was possible to see that this new model could be most useful in certain circumstances, especially on a bad floor, where the cost of sanding would be prohibitive.

J. Sagar and Co., Ltd., of Halifax, with three stands to show their Sagar and Bursgreen machines, have an impressive display, though most of the machines are already known to the trade. Exhibited for the first time is a triple-drum sander with endless rubber-belt feed, and certainly the design is pleasing and would not be out of place in the most modern woodworking establishment. Standard industrial motors are used with vee rope connecting drives to the drums. Another newcomer is an automatic saw sharpener for circulars up to 38in. Features about it are infinite variable adjustment for rate of feed and head movements, and special attention to compact design. The several new and remodelled saw sharpeners shown this year by various exhibitors would suggest a bigger interest in this side of the trade by the builders and contractors. The small user who does not have large quantities of timber coming forward continuously for cutting might find the Sagar 24in rise-and-fall table sawbench the answer to his need. It will cut wood up to 8in deep and has rotating body adjustment through the full circle.

On the Bursgreen stand is a new 18in x 9in combined surface planer and thicknesser, and a canting spindle dimension saw makes its bow to the trade, having been designed for the small user who does not want to go to the expensive heavier machines in this range. Where the volume of work warrants its use the auto nailer can be a handy machine in the shop.

On the stand of the Oliver Machinery Co., Ltd., of Manchester, are two machines which might cause the visitor to stop and spend a few minutes at this display. They are a useful sash haunching and relishing machine for top and bottom sash and door rails, and a glue jointer which produces a reversible and interlocking glue joint to satisfy most joiners, and it can also be used effectively to build up wider material from narrow stock.

A prototype of the new 26in circular sawbench can be seen on the stand of Metalclad, Ltd., of Stanningley, which

can be fitted with a rolling table if necessary. A late addition to the stand was the 14in universal pull-over crosscut, which has been given a modern design in keeping with the other machines placed on the market by this firm.

A self-contained and portable 6in planer, with attachment for tenoning, is shown on the stand of the Kine Engineering Co., Ltd., of Horley. Also worth a visit is the new senior router on the stand of the Central Tool and Equipment Co., Ltd., of Hemel Hempstead, while among the tools displayed by J. K. O. Cutters, Ltd., of High Wycombe, is the Vertiko machine for corner locking, cutting corners, shaping ends of rails, tenoning and haunching. The cutters on this unusual machine are fitted to a horizontal spindle, and a foot pedal is used to bring the cutters down through the timber.

On the stand of E. R. Cole, Ltd., of London, N.W.10, is to be seen a wide range of portable electric tools which would aid many of the smaller contractors and builders. Portable sawbenches are featured on the stand of the Liner Concrete Machinery Co., Ltd., of Gateshead, while a visit to the stand of the Midland Saw and Tool Co., Ltd., of Birmingham, will introduce the visitor to a universal woodworking machine which is something of a quick-change artist for a variety of jobs. William Osman, of London, N.20, are showing a new range of sawbenches and they claim their 9in surface planer and jointer a fully efficient tool for most tasks at the low price of £68 18s 6d. Some useful clamping machines which would be of value in many a workshop can be seen on the stand of the Projectile and Engineering Co., Ltd., of London, S.W.8. Among the huge plywood presses on the stand of H. Schubert, Ltd., of London, N.1, can be found sanding machines worth attention.

First time to make an appearance at the Building Exhibition, J. J. Smith and Co. (Engineers), Ltd., of Mellery, have made amends by a truly representative selection of machines of value to the building trade. On the stand of S. Tyzack and Son, Ltd., of London, E.C.1, great stress is made of the money saving achieved by their combination woodworker at £154 17s 6d. Their Zyro range of woodworking machines has been redesigned for the exhibition. Another stand worth a call is that of Whitehill Spindle Tools, Ltd., of London, S.W.20.

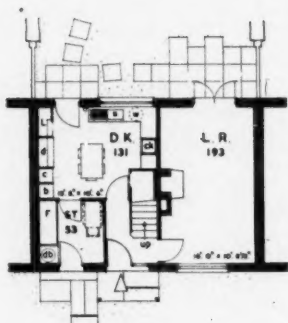
It has been possible to make only brief reference to many of the stands, and nothing has been said of the wide range of equipment shown by many firms which would come into the category of accessories. What can be said with certainty is that any builder or contractor searching for some new piece of woodworking machinery should not fail to visit the Building Exhibition this year, for it can safely be said he will find the piece of equipment he wants on show at one or other of the stands.

**BUILDING TRADES EXHIBITION 1951**

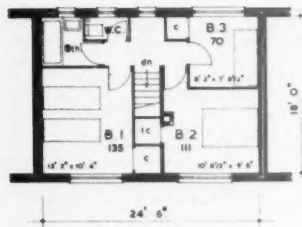
# new type plans for houses & flats shown by the Ministry of Housing & Local



ELEVATION TO THE ROAD



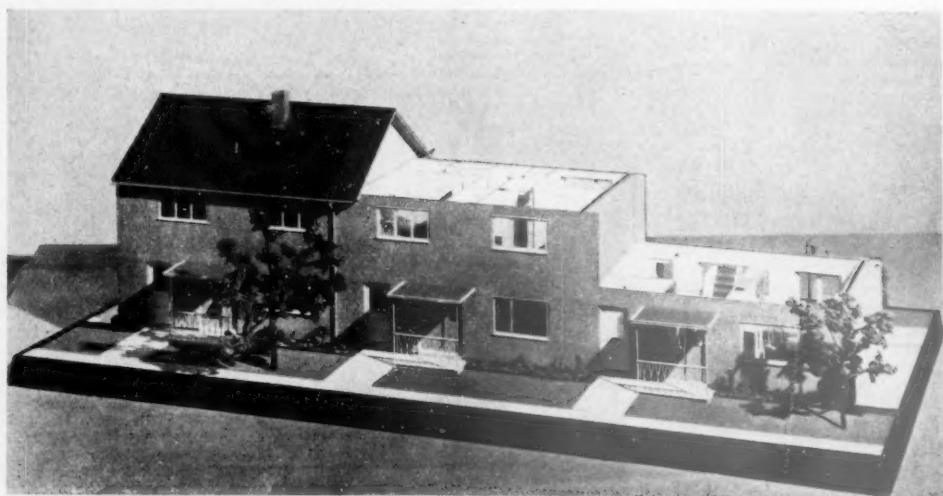
GROUND FLOOR



FIRST FLOOR

Net house area	829 sq. ft.
Store	53 sq. ft.
Gross house area	882 sq. ft.
Aggregate ground floor living area	323 sq. ft.

Cut-away model of above terrace houses



IN April of this year Local Authorities were advised by Circular 38/51 of ways in which house building costs could be reduced without lowering the essential standards of room space which were recommended in the Housing Manual, 1949. The Housing stand displays a number of plans and models prepared by the Ministry to show how these savings can be made.

Two comparative plans show the space savings gained by eliminating passage space. One plan, based on Housing Manual standards, is 1,050 sq ft in area and the area of the other, containing accommodation for a similar household, is 882 sq ft; a reduction of 168 sq ft. The ground floor living space of 323 sq ft in the smaller house illustrated on this page is only 14 sq ft less than that in the larger.

These savings are further exemplified on the stand by six other plan arrangements based on the same principles and in which four three-bedroom houses give an average saving of about 150 sq ft compared with houses built in the last few years. Comparable savings are made in the other two designs. All maintain the standards of living space, room sizes



photo of model on view at  
the Exhibition

## Government

and equipment recommended by the Ministry.

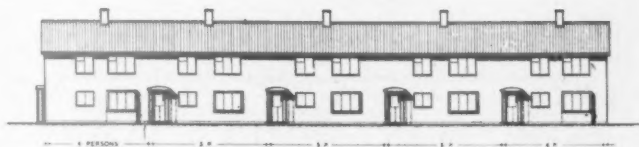
A sectional model (page 592) illustrates the use of one of these plans in terrace design. In this arrangement there is a small entrance hall, access from front to back is through the store and kitchen instead of through a shared tunnel between houses, access to the dustbin and fuel store is from the front of the house. Space and water heating services are provided by an improved type of open fire with a back boiler.

Two other sectional models (plans A1 and A2, B1 and B2) are shown of terrace houses now under construction experimentally at Coventry. In one model the houses are planned with the staircase rising from the living room. Whole house heating and hot water services are provided by an independent boiler (minimum rating 32,000 B.T.U.s per hour) with radiators in the living room, dining-recess and kitchen. It is estimated that, with an outdoor temperature of 30 deg, the ground and bedroom floor temperatures would be 65 deg and 55 deg respectively. In the other model the houses are planned with the staircase rising from the dining space; the living room is separate. The space and water heating service is provided by an improved type of open fire or stove (minimum rating 21,000-23,000 B.T.U.s per hour) with back boiler and with radiators in the dining space and kitchen. Using an appliance rated at 23,000 B.T.U.s it is estimated that the room temperatures would be as follows when the outdoor reading is 30 deg: Two-Bedroom House: living room 65 deg, dining space 56 deg, bedrooms 46 deg; Three-Bedroom House: living room 65 deg, dining space 51 deg, bedrooms 41 deg.

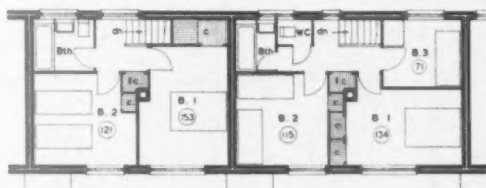
The principle of eliminating unnecessary passages and halls is also applied to a number of designs for flats in 3- and 5-storey blocks.

Designs and a model are shown of a new type maisonette, the "cross-over maisonette." It has economic advantages in high blocks as it enables the number of main staircases and lifts to be reduced. External access balconies are unnecessary and cross ventilation is provided in each dwelling.

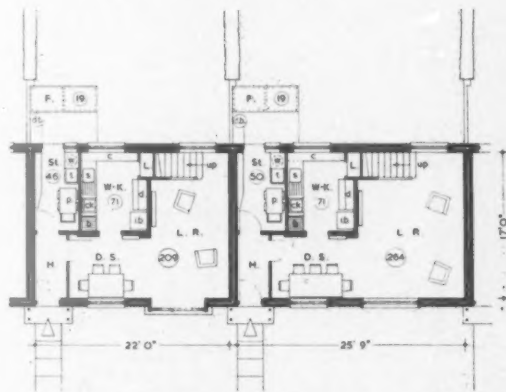
Plans of a 9-storey block of 53



ELEVATION TO THE ROAD



FIRST FLOOR



A 2

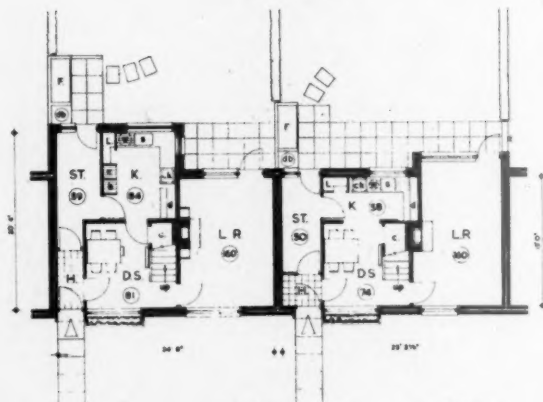
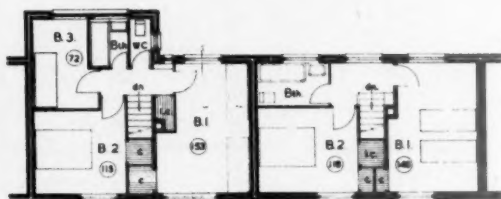
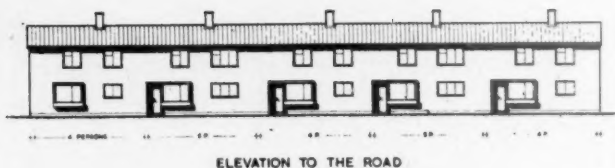
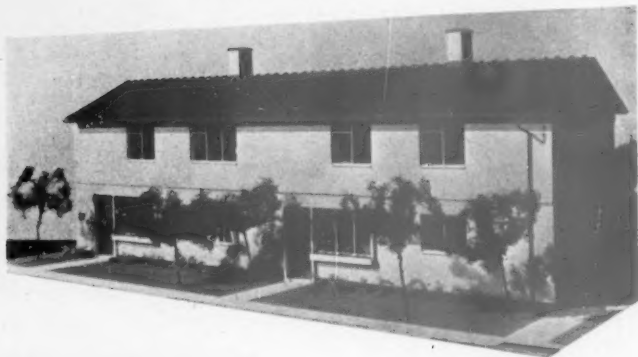
4 PERSONS - GROUND FLOOR - 5 PERSONS

A 1

	4 Persons	5 Persons
Net house area	709 sq. ft.	826 sq. ft.
Store and fuel	45 sq. ft.	69 sq. ft.
Gross house area	774 sq. ft.	895 sq. ft.
Aggregate ground floor living area	280 sq. ft.	320 sq. ft.

TWO AND THREE BEDROOM TERRACE HOUSES

**M.O.H. AND L.G.  
TYPE PLANS  
FOR HOUSES  
AND FLATS**



**B 1** 5 PERSONS

**GROUND FLOOR**

**4 PERSONS**

**B 2**

Net house area	722 sq. ft.	826 sq. ft.
Fuel and Store	62 sq. ft.	71 sq. ft.
Gross House area	784 sq. ft.	897 sq. ft.
Aggregate ground floor living area	292 sq. ft.	325 sq. ft.

**TWO AND THREE BEDROOM TERRACE HOUSES**

dwellings illustrated on page 596 incorporate 32 cross-over maisonettes; only two lifts and two staircases are needed to serve all the dwellings.

Plans are also shown at the stand of a 9-storey composite block incorporating cross-over maisonettes on the six top floors of the central spine with flats on the lower floors and throughout the end wings. There are 68 dwellings; 62 of them are served by two lifts and two main staircases, the remainder comprise six flats in the centre of the block, served by an independent staircase.

**Housing for Special Purposes**

Part of the exhibit includes housing for special purposes and is based on a report, issued this year by the Ministry, of a sub-committee of the Central Housing Advisory Committee. There is a model of a hostel providing for 28 persons in 24 single rooms of 140 sq ft and two double rooms of 180 sq ft. The plan includes communal room, kitchen, stores and staff room, guest room and warden's flat.

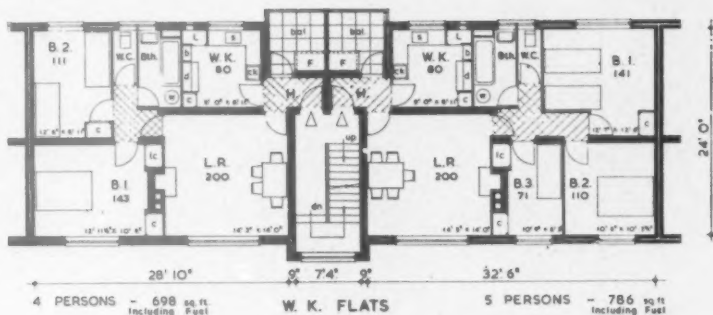
Another dioramic model shows a typical bed-sitting room for an elderly woman.

Photographs are shown of two completed hostels, one for students and the other for old people.

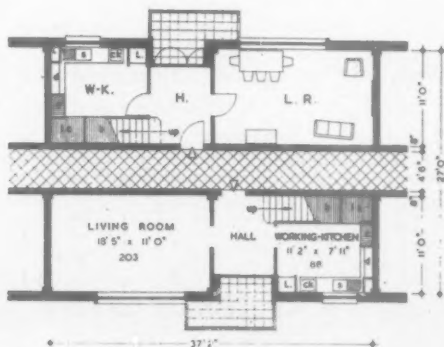
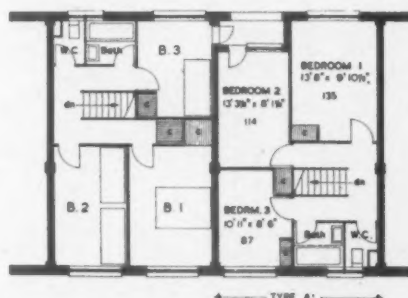
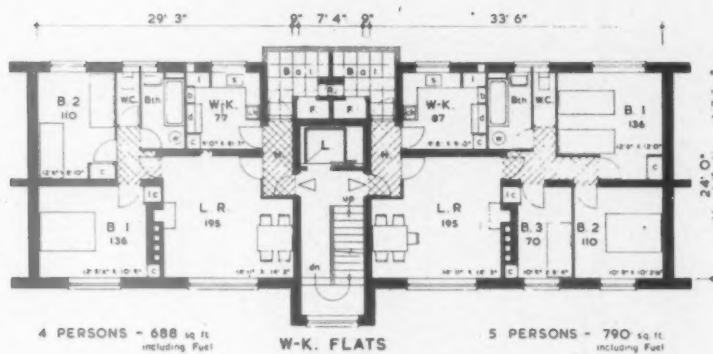
The permanently disabled are best housed in bungalows, and a plan and photograph of a completed scheme is shown. Special requirements in planning include ramps instead of steps, wider passages and doorways, sliding doors where practicable, holding bars in W.C.s, suspended hand grips wherever the disabled person has to move from the wheel chair.

A two-storey house plan has been specially designed for the needs of a District Nurse. This plan can easily be adapted as a normal family dwelling.

FLATS IN  
3-STORY  
BLOCKS



FLATS IN  
5-STORY  
BLOCKS



Living Room Floor 1st, 3rd, 5th and 7th

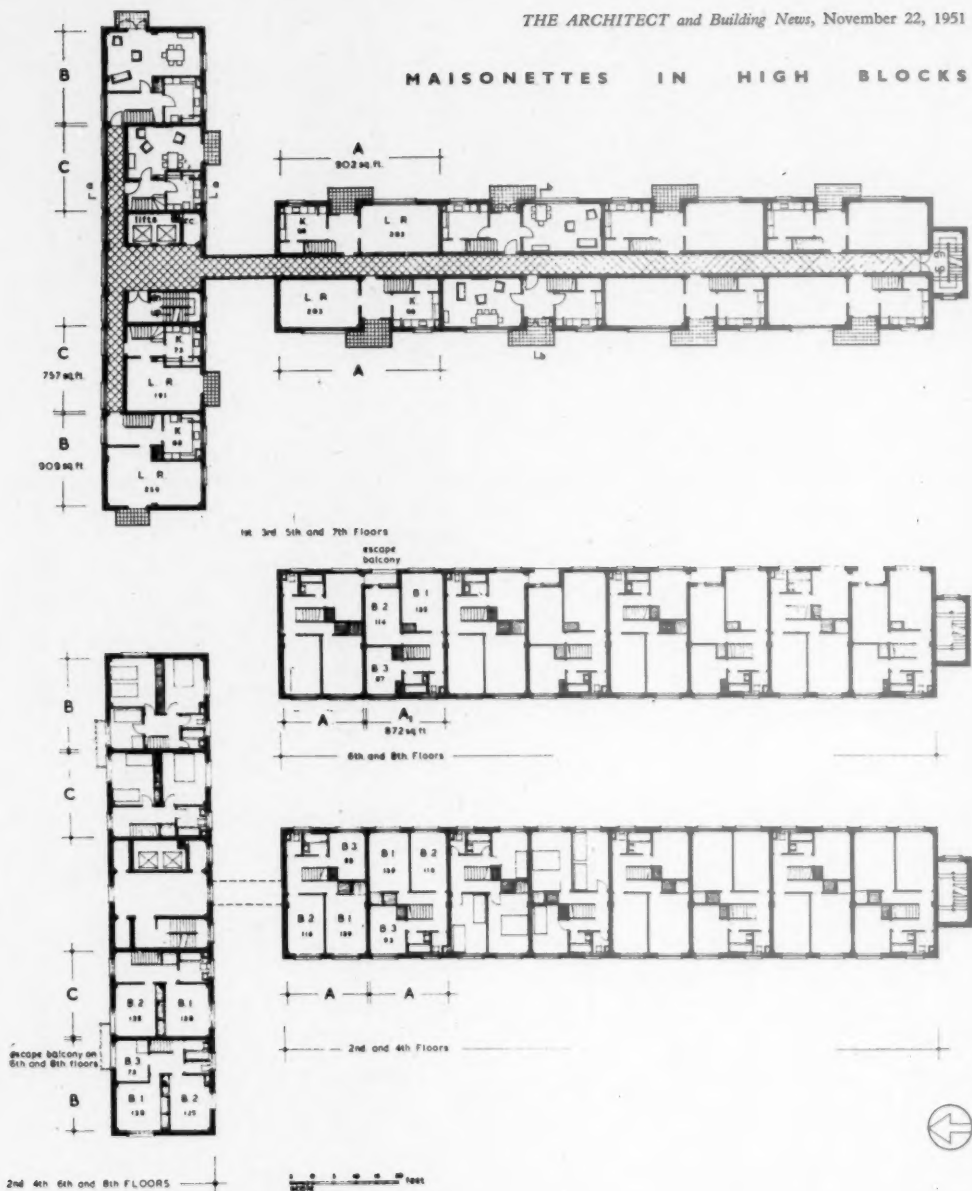
TYPE A  
5 Person - 900 sq. ft.

TYPE A'  
5 Person - 874 sq. ft.

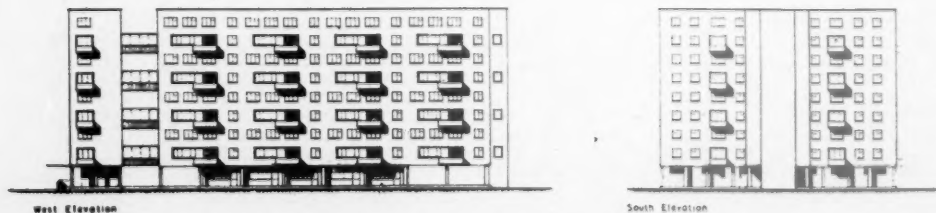
CROSS-OVER

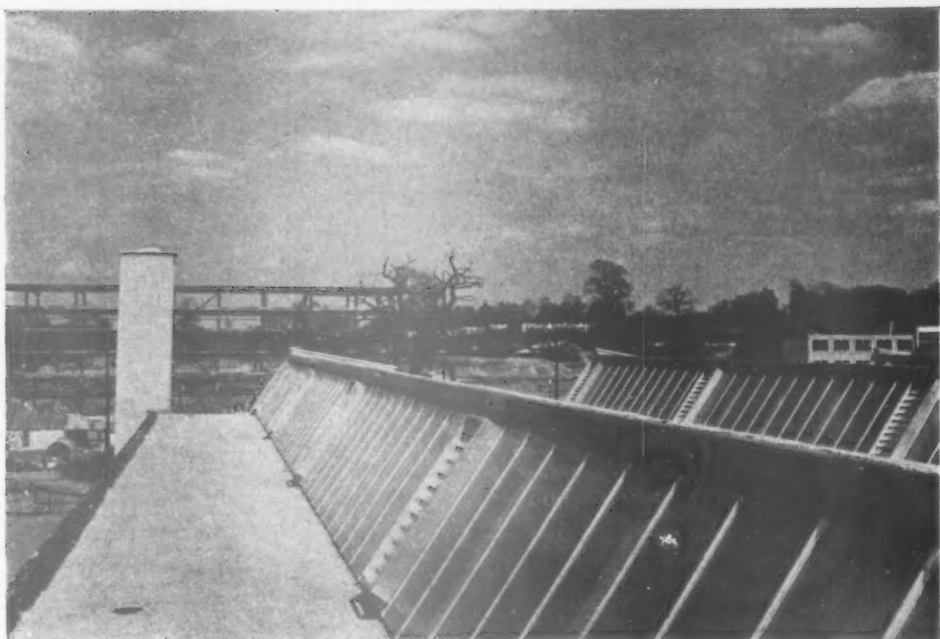
MAISONNETTES

# MAISONNETTES IN HIGH BLOCKS



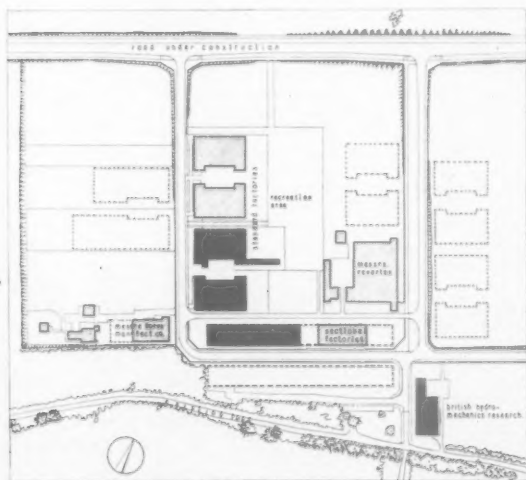
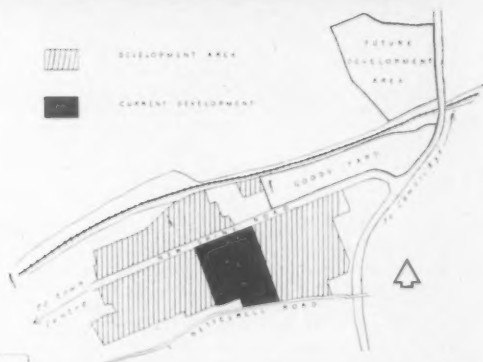
## NEW M.O.H. & L.G. TYPE PLANS SHOWN AT OLYMPIA





## HARLOW INDUSTRIAL ESTATE

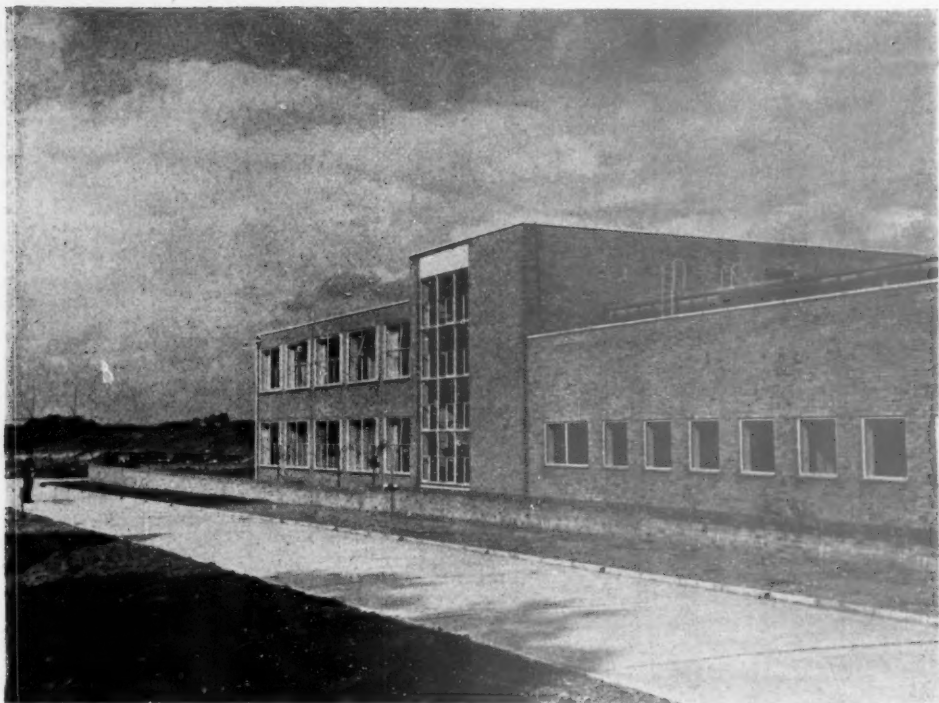
W. ERIC ADAMS, O.B.E.,  
General Manager  
Harlow Development Corporation  
FREDERICK GIBBERD, F.R.I.B.A., M.T.P.I.  
Architect Planner  
V. HAMNETT, B.Sc., A.R.I.B.A., A.R.I.C.S.  
Executive Architect



THE master plan for Harlow New Town provides for two industrial areas situated in the north-east and north-west corners of the Town.

The eastern industrial estate which is now in course of development offers some 112 acres net for factories and 40 acres for railway goods yards to serve the Town; in addition an area is reserved north of the railway, to be used if required, for further factory sites. The estate is planned with a spine road running parallel with the railway to form a link with the Town centre to the west and the London-Cambridge road to the east. Principal factories will have frontage on this road and loop roads branching South from it will give access to the rest of the development. The spine and loop roads are at present in course of construction, and current development is taking place in the





# LABORATORIES FOR BRITISH HYDROMECHANICS RESEARCH ASSOCIATION

south. The access road to the estate is at present Netteswell Road which forms the southern boundary of the estate. This road will ultimately become a cycle track.

In establishing industry in the New Town the Corporation is proceeding with three types of development. (1) By the erection of a sectional factory. This is a unit of about 2,000 sq ft, capable of being multiplied up to say 10,000 sq ft in similar units to meet the needs of the "smaller man." (2) By the erection of a standard factory of 20,000 sq ft, capable of being multiplied into units of up to as much as 100,000 sq ft and (3) By the leasing of sites at a ground rent for the industrialist to develop himself. In certain cases a factory may combine the standard accommodation and "special purpose" space built to the industrialist's own specification and erected at his cost.

The Corporation's current industrial programme includes:— 8 sectional units, 2 standard units, and 1 standard plus special purpose unit built and let. In course of development are:—5 sectional units, 3 standard units, and 2 standard plus special purpose units. All these units are reserved for the firms who will occupy them. In addition, three sites of 6, 3 and 1 acres respectively have been let for development by industrialists and a number of other schemes are projected. During the next two years industrial employment for 1,100 people is expected to be provided by the current programme.

The buildings described in this article illustrate examples of the three types of development which the Corporation are proceeding with. Following the description of the new

Laboratories, the standard factory is described on pages 602-604 and the sectional factory on page 605.

## New Laboratories

This was the first building to be completed and occupied on the estate. Erected by the Corporation for the British Hydromechanics Research Association, the plan has been influenced by the Corporation's requirement that the building should be capable of easy conversion for factory use, in the unlikely event of the termination of their clients' lease.

Provision has been made for the present building to be extended on its north side parallel to the estate road to include a two-storey block of additional offices, and for the enlargement of the main laboratories by two bays. The pond in the courtyard when constructed will be connected to the well and sump inside the building.

## Construction

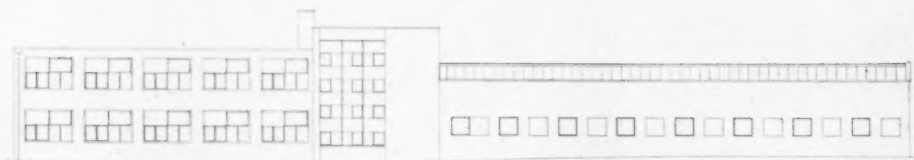
Office block: Walls, load-bearing brick. First floor and roof: hollow, precast concrete reinforced units. Main Laboratory: steel frame on a 24ft grid. Walls: brick panel. Roofs: precast reinforced concrete units. Monitor roofs are supported on steel welded frames at 12ft centres.

## Finishes

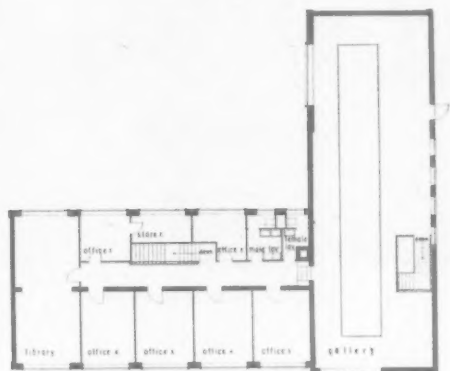
Facing bricks, London Stocks. Copings, white artificial stone. Window and door surrounds, precast concrete painted white. Windows, metal painted white. Shutter

[Continued on page 600.]

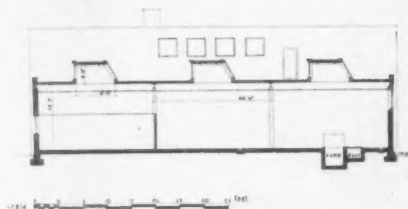




west elevation

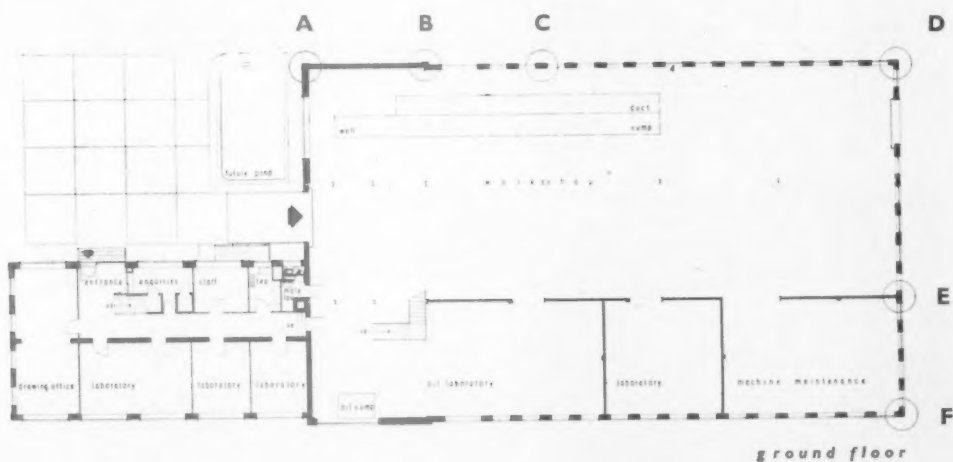


first floor



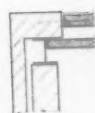
section

NEW LABORATORIES



ground floor

wall details at stanchions



A



B



C



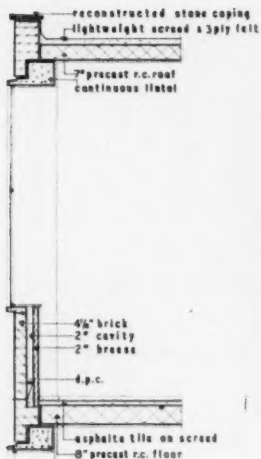
D



E



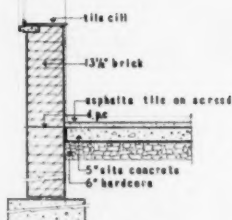
F



typical monitor roof

Continued from page 598.]

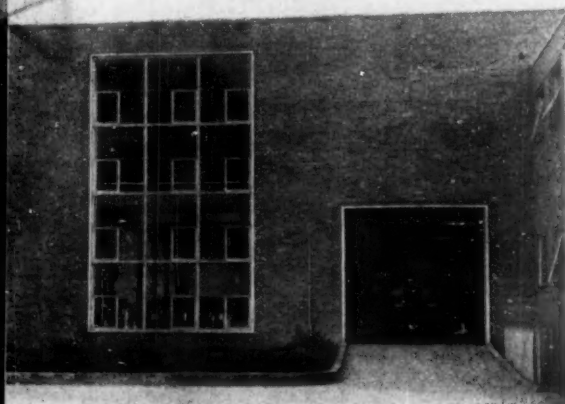
gates, patent, painted Gentian blue. Office block floors, grey and brown asphalt tiles. Office walls and ceilings, plastered and painted Cotasco. Laboratory : Brickwork, hollow clay blocks and concrete roof units, all fair faced and painted Cotasco. Main Laboratory floor finished with Ironite ; oil laboratory floor, oil-resisting asphalt tiles ; gallery floor open steel mesh.

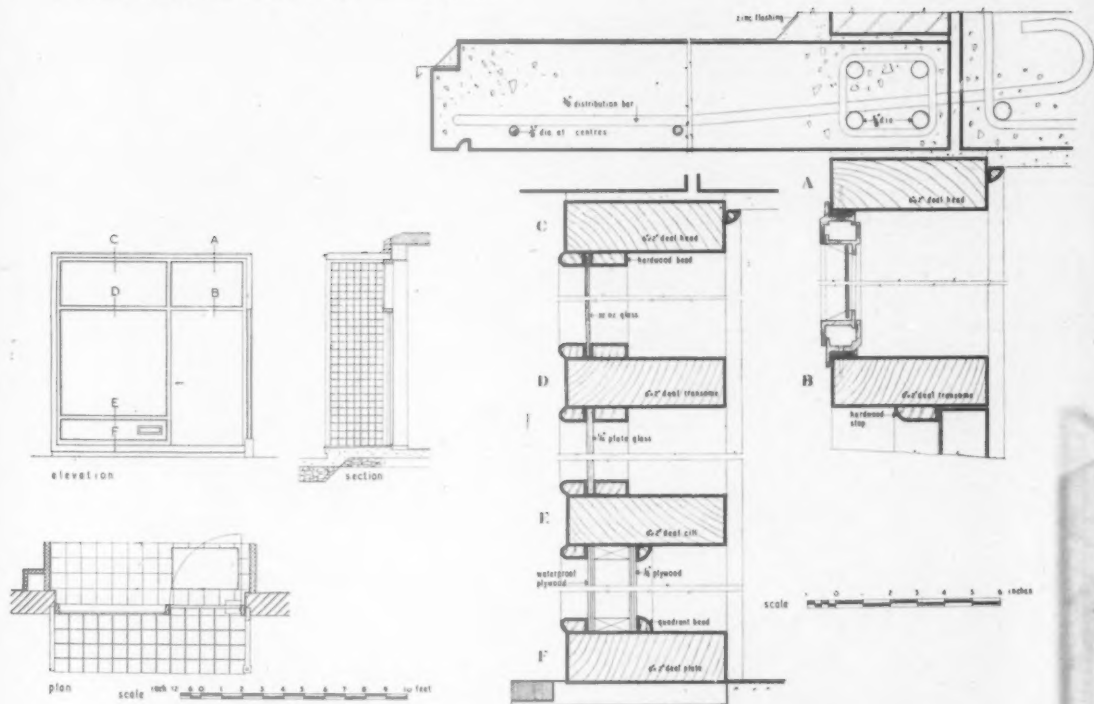


section through office block wall

## NEW LABORATORIES FOR BRITISH HYDROMECHANICS RESEARCH

Left: Main entrance to the Workshop from the courtyard, with large window rising vertically through Workshop and Gallery. Right: The office block.





Details and photograph of the main entrance door to the office block. The frost-proof tiles to the porch wall are blue-grey and the underside of the hood is painted dark red. The door frame is painted white and the door itself dark brown.

## ASSOCIATION, HARLOW INDUSTRIAL ESTATE

### MAIN CONTRACTORS:

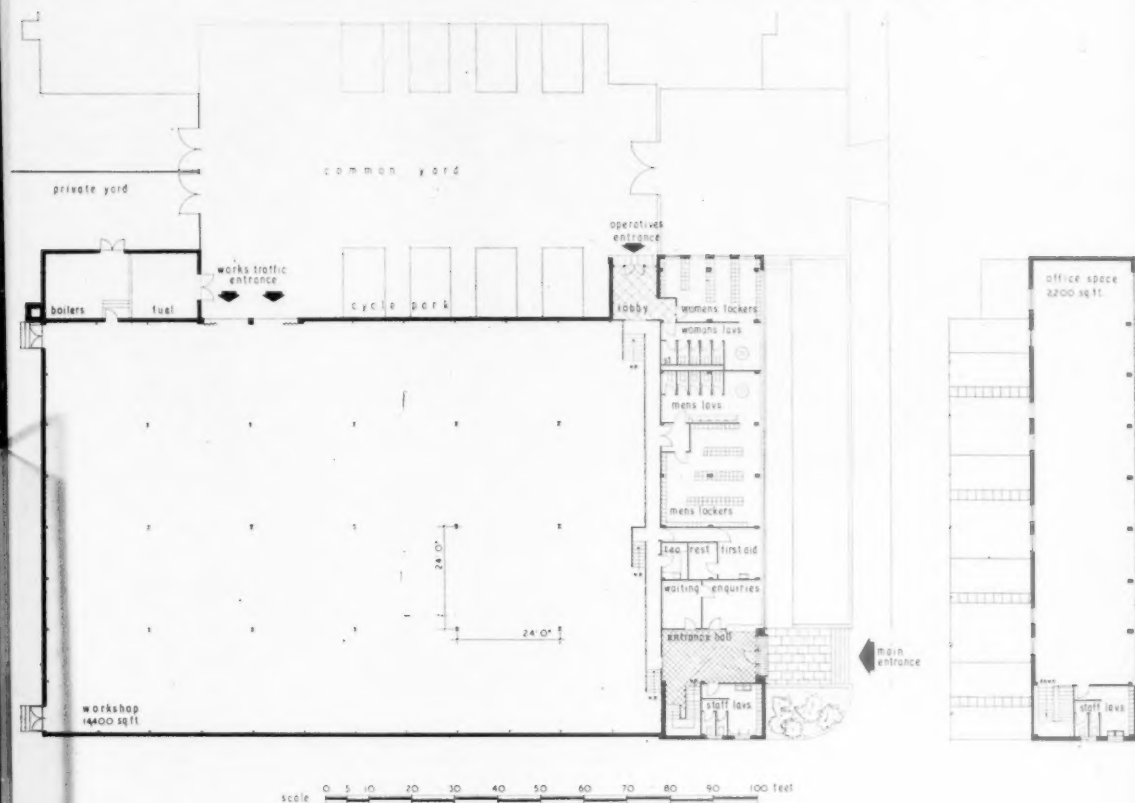
A. G. BOYD GIBBONS  
GEO. WIMPEY & CO. LTD.

### Sub-Contractors

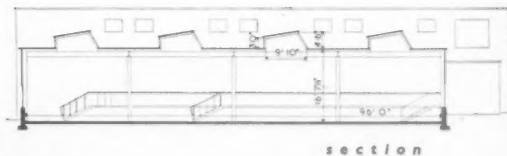
**Bricks—Facing :**  
Eastwoods Ltd.  
Uxbridge Flint Brick Co. Ltd.  
**Electrical Installation :**  
Eastern Electricity Board  
Matthew Hall & Co. Ltd.  
**Gas Installation :**  
Eastern Gas Board  
Matthew Hall & Co. Ltd.  
**Glass Dome :**  
T. & W. Ide Ltd.  
**Handrailing and Balustrading :**  
Clark Hunt & Co. Ltd.  
General Constructional & Engineering Co. Ltd.  
**J. & W. Shale Ltd.**  
**Heating :**  
Earley & Noon Ltd.  
Matthew Hall & Co. Ltd.  
**Ironmongery :**  
G. & S. Allgood Ltd.  
A. J. Binns Ltd.  
Comyn Ching & Co. Ltd.  
Lockerbie & Wilkinson Ltd.  
**Painting :**  
C. Hastings Ltd.  
C. & T. Painters Ltd.

Continued on page 603.]





plans

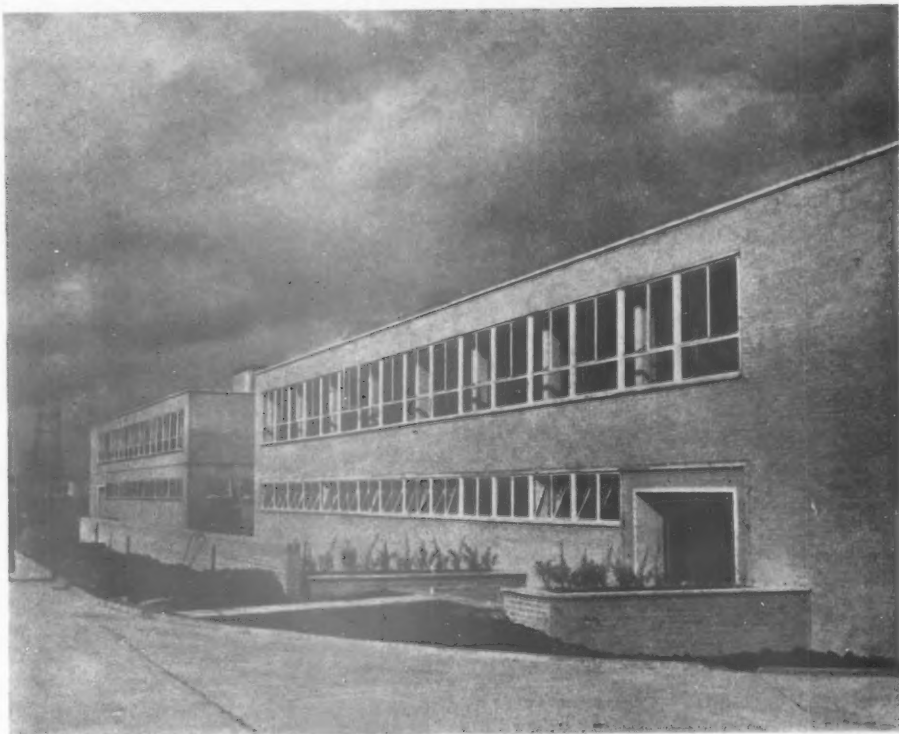


#### STANDARD FACTORY HARLOW INDUSTRIAL ESTATE

**T**HIS type of factory has a total area of 19,564 sq ft of which 13,824 sq ft is production space and 5,000 sq ft is the total of the two-storey block. The latter includes 2,160 sq ft of office space on the first floor which can be divided up as required. The plans show the accommodation. The monitor roof lighting provides an average day light factor of 7.5 per cent over the production floor area. Heating is provided by low pressure system and gas-fired boiler. Unit heaters are planned at high level in the production area and radiators in the administration block.

#### Construction

**Production area :** steel frame on 24ft grid. Cavity walls below sill level, brick outer skin, block inner skin. Above sill level, vertical patent glazing then asbestos cement sheeting lined on the inside with "Tentest," painted. Roof 2in Thermacoast channel reinforced wood wool slabs and built-up roofing. **Two-storey block :** steel frame and cavity walls ; metal window frames ; floors and roofs, reinforced concrete.



The main entrance elevation to two of the completed Standard Factories. Below is a view of the long windows looking out on the road from the first floor office space.



Continued from page 601.]

Patent Gates :  
Bolton Gate Co. Ltd.

Patent Glazing :  
Aygee Ltd.  
Williams & Williams Ltd.

Pavings :  
Marley Tile Co. Ltd.

Plumbing :  
Matthew Hall & Co. Ltd.

Precast Floors and Roofs :  
Concrete Ltd.  
Fabricrete Products Ltd.

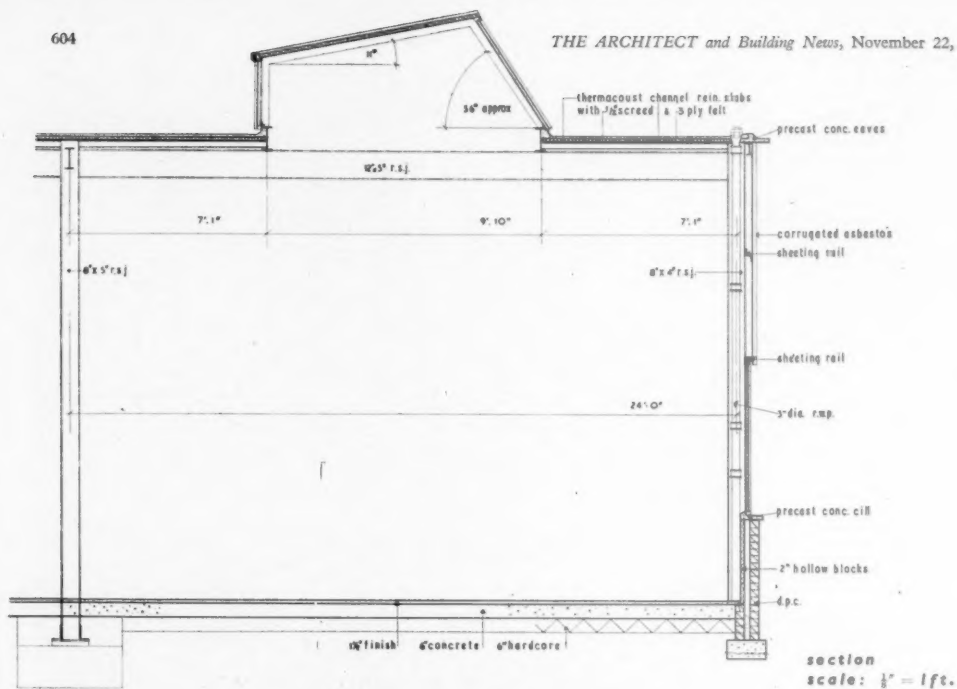
Roofing :  
Permanite Ltd.

Sanitary Fittings :  
Stitsons Sanitary Fittings Ltd.

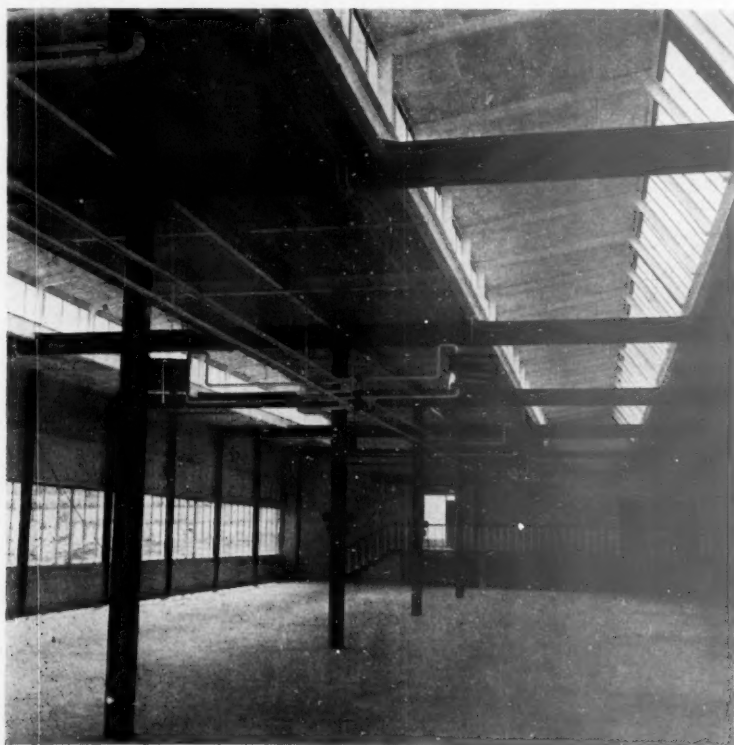
Steelwork :  
Boulton & Paul Ltd.  
Matthew T. Shaw Ltd.  
Edward Wood & Co. Ltd.

Terrazzo :  
Jaconello Ltd.

Windows :  
Aygee Ltd.  
Williams & Williams Ltd.

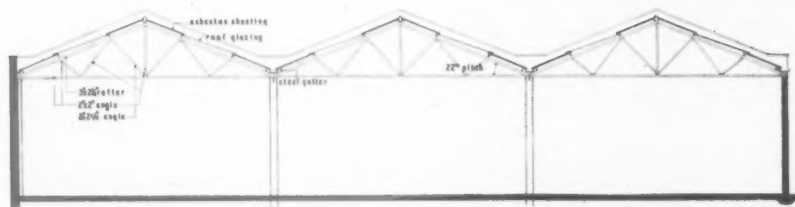


## STANDARD FACTORY

the main  
factory space



plan scale:  $\frac{1}{32}'' = 1 \text{ ft.}$



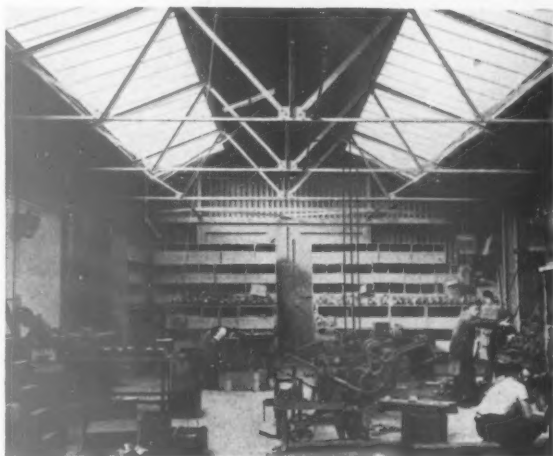
section scale  $\frac{1}{16}'' = 1 \text{ ft.}$

Each factory has a total area of 2,100 sq. ft. and can be used as a self-contained unit complete with an office, etc. Alternatively several bays may be combined forming one factory with offices as required. The production space of one bay exclusive of ancillaries is 1,770 sq. ft.

#### Construction

Steel frame of beams and stanchions with 11 in cavity brick outer walls and 9 in party walls. Floor 6 in concrete slab finished Ironite topping. Rear walls, corrugated asbestos cement sheeting fixed direct to steel work. The roof is covered with "Big Six" asbestos cement sheeting and patent glazing supported on steel trusses of 30 ft span. Roof ventilators are manually operated. Windows, standard metal with opening lights. All steelwork is painted.

#### SECTIONAL FACTORY



H A R L O W I N D U S T R I A L E S T A T E

## C O R R E S P O N D E N C E

Payment for Work by  
Local Authorities

To the Editor of A. &amp; B. N.

Sir,—There is an overwhelming amount of evidence to show that Building Contractors who undertake building work for Local Authorities and Government Departments, are becoming seriously embarrassed as a result of the slowness of the Authorities in making payment for work completed. The situation was becoming serious towards the end of last year, but has become infinitely more acute during the past few months as a result of the many recent increases in material prices.

The causes of the trouble are no doubt fairly obvious. In the case of housing construction the main burden is now carried by the Local Authorities, whereas before the War the bulk of the work was carried out under private auspices. Under the general post-war conditions Local Authorities have been unable to build up the necessary Survey Staff to cope with the enormously increased burden and the passing of the Town and Country Planning Act has in many cases reduced the qualified Survey Staff available for new housing work.

Interim payments appear in general to be made regularly and promptly but the payment for extras due to increased cost of materials is in nearly all cases only made after a considerable lapse of time, in many cases as much as eighteen months to two years after completion of the Contract. In many instances the sums involved are very considerable and when the amount representing the customary 10 per cent retention is added, represent an outlay which is stretching to the limit the capital resources of the firms concerned. Some indication of the final result of this situation is provided by the following Board of Trade statistics:—

Failures under the Bankruptcy and Deeds of Arrangement Acts, England and Wales

	1949 Bkcies. & Deeds	1950 Bkcies. & Deeds	1951 Bkcies. & Deeds
--	----------------------------	----------------------------	----------------------------

Builders, Plumbers and associated trades	228	350	352 (an approximation for 12 months based upon actual figures for first 9 months).
--	-----	-----	---

Proportion of above to total figures for all trades	13.5%	17.03%	17.8%
---	-------	--------	-------

This trend is serious both for the building Trade and this country, but even if the strain does not result in bankruptcy of the Main Contractor, there are other repercussions which demand serious attention.

The strain suffered by the Main Contractors is always to some degree passed on to the Sub-Contractors and to the suppliers of materials, and all

concerned will agree that the length of credit demanded for the provision of these essential services is extending at an alarming rate. The provision of extremely long credit with its inevitable accompaniment of higher credit risk must ultimately be reflected in the cost of the services provided, with corresponding reflection in the cost of the Contract.

Quite apart from this, as a direct result of this unwholesome state of affairs peculiar to Municipal and State Contract work, there is much evidence to show that many well-established Building concerns and Sub-Contractors of repute are now avoiding Housing Contracts in particular.

Many Authorities are now experiencing grave difficulty in obtaining tenders for House Construction and are being compelled in many instances to reduce the size of Contracts to uneconomic size in order to attract some of the smaller (and often inexperienced) firms into the field. Again the result is increased Contract costs.

There are other undesirable elements too numerous to recite in this communication.

In the opinion of this Council the question is one which should command the urgent attention of all those representing the many sections of the Building Industry. The object of this letter is to test the reaction to a suggestion that a meeting, representative of the trades involved, be called shortly in order that the whole subject be thoroughly explored with a view to taking strong collective action for suitable remedies.

I am, etc.,

W. S. SHIRRA,  
Chairman, Distributors of Builders  
Supplies Joint Council.

## N.U.S. Report

To the Editor of A. &amp; B. N.

Sir,—Being myself a student, and having recently returned from the Soviet Union, I was interested to read your comments concerning the Report of the recent N.U.S. Delegation to that country.

You observe that "it is one of the best factual reports of a visit to Russia that I have read." Certainly, many significant facts do emerge from a reading of it: the figure of 800,000 full-time students in institutions of university standing indicates a higher proportion of students per head of the population than exists in Gt. Britain; we are told that 70 per cent of the students in Moscow pay no fees and that over 95 per cent of Soviet students (98-99 per cent in Leningrad) receive grants which, unlike so many British student grants, bear a real relationship to the cost of living.

But it would be unrealistic to pretend that it is a complete or accurate, "factual record"—indeed, one member

of the delegation itself has written that it does not claim to be complete. The delegation, whose "prime purpose was to gain first-hand knowledge of the process of higher education in the U.S.S.R.", devotes less than 20 pages of a 65-page report to fulfilling this "prime purpose" and much of the information is incomplete and inaccurate. For example, only half a page is given to grants, and the highest rate for basic grants is 600 roubles per month, not 400 as stated; fees are dismissed in two lines, and the figure given of 400 roubles per year applies only to Moscow, Leningrad and the capitals of Union Republics; elsewhere the figure is 300 roubles per year. These are but two of many such inaccuracies and omissions. The failure of the delegation to investigate fully even matters within its own sphere of competence casts doubt upon the value of its judgments in the many other spheres into which it ventures.

You also observe that the delegation's "main complaint" was that there was "too much formal entertaining, too much food and not enough personal contact," and you add "as far as I know everyone who has ever visited the U.S.S.R. has found the same." Well, I myself have no great objection to formal entertaining—when one is the guest of an organization anywhere it is to be expected and in the Soviet Union is done very pleasantly, and I certainly have no objection to food, even in large quantities! As for personal contact, I would stress that I found no difficulty whatsoever in making personal contacts with whomsoever I wished, be they students, doctors, teachers, schoolchildren or anyone else. Never did I encounter any obstacle to free, private and prolonged discussion.

I am, etc.,

DENNIS G. OGDEN.

To the Editor of A. &amp; B. N.

Sir,—I obtained a copy of this report, and read it through most carefully and, in consequence, would like to congratulate Abner on his most "fair" comments, as published in your issue of the 1st inst.

I hesitated to write to you straight away, as I felt sure that the Report's exposure of so many of the Communist's claims would readily "draw the fire" of some gullible Gus who would write you a letter containing the usual pile of statistics and finish up by painting the Soviet picture in the brightest of pleasing colours.

Just as I anticipated, this letter has been written and appears over the name of F. W. B. Charles.

His statistics, as with Bernal's, are largely a matter of "what he was told" and not what he actually saw on the jobs.

The last paragraph of his letter which reads that "to be an architect under capitalism is relatively a mug's game" places a true value on his letter which few can dispute.

I would point out that the deplorable standards of workmanship seen by the visiting students—though denied by Mr. Charles have been often confirmed by other visitors—to myself in particular by a well-known Communist member of the Church of England whose visits to the U.S.S.R. are far more frequent and lengthy than those of Mr. Charles.

As it would appear that our best chances of avoiding war with Russia, lie in the widest possible contacts, would it not be possible for a party of, say, 50, English Architects to tour Russia (the itinerary to be agreed beforehand). And a similar party of Russians to tour this country. The "freedom" and general conditions to be the same in each case, and the reports to be published together for distribution in both countries.

SIDNEY LOWETH.

To the Editor of A. & B. N.

Sir,—While Mr. F. W. B. Charles has produced some extremely interesting comparative figures concerning building achievements in the U.S.S.R. and in Great Britain since the end of the war, it is manifest that, unless there is a common crucial criterion of building standards, accommodation, services and equipment, this cascade of statistics will fail to turn the turbine of true comparison, but pass on worthless to the oblivion where rests so many in this fashionable age of tables and numbers. Apart from a generalization of "houses and flats of similar category," Mr. Charles deems it unimportant to broach the subject of standards of building technique which is one of the all-important yardsticks, but throws in a piece of time dishonoured "begging the question" with his proposal to show an A.A. Student bad examples in our own country. Come, Sir, can it be that one must judge a country's achievements by its bad examples—a very non-adult approach, which perhaps appeals to those of us who like wearing red-coloured spectacles?

A point upon which Mr. Charles has not touched is the architectural appearance of this volume of post-war Soviet building. Under Sovietism "all things wise and wonderful" seems to be ubiquitous. It would be informative to view photographs in the *Architect & Building News* of some of the finer, recent Soviet buildings, which would serve as some indication, for, like many in this country, I am not acquainted with the aesthetic advance of the Soviets living Utopian-wise, but I do know that some very fine flats, schools and houses have been built in this country since the war.

One wonders if Mr. Charles has followed his own suggested logical conclusion in that on finding the true state of things in the Soviet Union, one finds that to be an architect under capitalism is relatively a mug's game and where does he find himself?

I am, etc.,

W. HOME.

## Royal Engineers

To the Editor of A. & B. N.

Sir,—Ref. Vol. 200, No. 4318, *The Architect & Building News*, dated September 20th, 1951, page 306—paragraph relating to Mr. Charles A. Richards, A.R.I.B.A., A.A. Dipl.

The correct abbreviation for Corps of Royal Engineers is R.E., not "R.E.s."

I am, etc.,

MAJOR I. F. FENSHAM-BOOTH.

## Planning

To the Editor of A. & B. N.

Sir,—In your article Local Government and Planning (November 1, 1951) you express the hope that the change in Government will suffer no pause or "backsliding" in dealing with the development plans prepared under the requirements of the Town & Country Planning Act, 1947.

I am sure that few will quarrel with you over this but there are undoubtedly many different views on just how the Minister should deal with some of the development plans produced. All will agree that action is essential.

You go on to say that it is increasingly important that we get down to implementation under a system of clearly understood priorities as soon as possible. Again all must agree, for planning without implementation can only result in frustration and act as a disincentive to trading and productive development.

The real truth of the whole matter, in my opinion, is contained in your statement that "Agreement about plans is a public matter!"

This to some authorities is a very unpleasant fact which they attempt to hide, hoping that acts of Parliament will provide the means to club the objectors into silence.

Personally, I would say that to obtain public agreement in the true spirit of the word is, in this matter, utterly impossible however energetic the "schooling" by the planning propagandists may be other than resort to the methods of the Middle Ages!

Nobody of spirit possessing independence of thought takes kindly to being "planned" in any case, but when the planners create a mumbo jumbo of expression all their own and talk airily with their heads stuck well up in the clouds while their clumsy feet trample upon the possessions and traditions of their would-be victims, they deserve all the contempt they receive.

If this campaign for a "properly" planned economy is to make practical as opposed to theoretical headway then I think the whole attitude of the planners has got to change.

First, the public are the masters and employ the planners, an unpalatable fact to many and to some extent overlooked by those who should know better.

Secondly, the public are the majority who have to live, work and take their leisure in the surroundings created by the planners and whilst many an artist

will suffer hardships of unbelievable severity for the sake of his art that is a personal idiosyncrasy not to be inflicted on all and sundry.

Thirdly, the public have to pay the piper and though a particular planner may think his particular creation is worth a sixpenny rate, he may be surprised to find what others think!—and it is just that that really matters.

The Town & Country Planning Act, 1947, has produced an outbreak of "town planning" and like an epidemic it has struck into every city, town, village, hamlet and home—a plan at any cost to satisfy the Minister and the insatiable yearnings of the planner to alter what is known to work for the glorious uncertainties of "something new, old boy!" has, in many cases, been the result.

Where the Hun had cleared the way and forced implementation of the demolition stage there is every reason to think along lines anew, but where cross hatching with a pen sterilizes considerable and thriving areas of a community's business centre and visualizes the next war with some well-directed hits as the only means of attaining the logical outcome of such a plan, then it is time to call a halt, for it is madness and the waste of public funds.

Most town plans appear to completely overlook such unpleasant facts as rateable values and the limitations imposed by the economics of trading and employment, also the cost of adequate compensation to the displaced persons.

The public is very logical and, to the planner, exasperatingly dogmatic on this embarrassing matter of cost and compensation, the outlook here is the perfectly simple human one of how will it affect my property, my livelihood, my pocket. The fleeting glances permitted to the public of the mysterious coloured maps produced somewhat furtively by the back-room boys have been very much as those given by indulgent parents to the scribbles of their offspring safe in the knowledge that they, the parents, will have the final say before implementation becomes a practical possibility.

From personal inspection and study of certain town plans and a suspicion that they are by no means uncommon, I venture to express the opinion that the Minister will need to apply the most drastic practical tests to the schemes submitted before they come to the point of receiving official blessing, and if this is done one can expect to see the rubbers working overtime where nothing but rubble would have resulted.

Unless town planning is closely linked with the economics of trade and living and is realistic in its artistic and theoretical approach to these governing factors little can come of the bulk of the redevelopment visualized on paper to-day, except the annoyance and waste of time and money of so many by so few.

I am, etc.,

M. R. FLETCHER.

## The Sixth Discourse

I WONDER how many members of the R.I.B.A. Council have read the list of books recommended for candidates preparing for the Institute's examinations, which they approved at a meeting on March 7, 1950. I wonder, too, how many of the books on the list they have read. When they studied the list, did they, like myself, find it rather humiliating to discover that they had read only a proportion, and that there were some they had never even heard of? Perhaps there is some excuse if one does not have a deep knowledge of C. H. Stock's "Treatise on Shoring and Underpinning," or cannot quote spontaneously from Heaton's "Outline of Paint Technology." But surely anyone with pretensions to architectural scholarship should be well acquainted with the fifteen books listed under the title of General Reading. Yet even here there was one that I, at least, had never read; nor, so far as I could discover, had any student. I refer to Sir Joshua Reynolds' "Sixth Discourse on Art."

The Discourses were last published, I believe, in 1905, and are not easy to come by. It may, therefore, be of interest to candidates for the R.I.B.A. Examinations to learn something of those words of wisdom which the Council recommends for general reading.

The subject of the Sixth Discourse is IMITATION. According to Sir Joshua, not only do we learn through the imitation of others, but this imitation "may be extended throughout our whole lives without any danger," and does not prevent us from "giving that original air which every work undoubtedly ought always to have." This is the heretical propaganda which the Council of the Institute prescribes for the innocent student.

Sir Joshua continues, "I am persuaded that by imitation only, variety and even originality of invention is produced." One cannot help imagining the scene at the Oral Examination in the Institute if the student has read and assimilated this discourse, and faithfully followed the advice of Sir Joshua.

*Examiner:* But, you know, this design is just a crib. Surely you could have thought up something more original than this?

*Student:* I am persuaded by Sir Joshua Reynolds that by imitation only, variety and even originality is produced.

If, however, the examiner has read the Discourse, he may be able to confound the student, because Sir Joshua is aware of the dangers of plagiarism. A design may "be warrantable, or deserve commendation, according to the address with which it is performed. There is some difference, whether it is upon the ancients or moderns that these depredations are made. It is generally allowed that no man need be ashamed of copying the ancients; their works are considered as a magazine of

common property, always open to the public, whence every man has a right to take what materials he pleases. It must be acknowledged that the works of the moderns are more the property of their authors. He who borrows an idea from an ancient, or even from a modern artist, and so accommodates it to his own work that it makes a part of it can hardly be charged with plagiarism; poets practise this kind of borrowing without reserve."

Thus Sir Joshua leads up to the following conclusion: "Borrowing or stealing with such art and caution, will have a right to the same lenity as was used by the Lacedæmonians; who did not punish theft, but the want of artifice to conceal it."

There seems to be no limit to the deceptions which Sir Joshua would encourage in the student. One need not confine one's studies to the best, for even "artists in the inferior branches of the art will contribute to furnish the mind and give hints. Indeed, the student can pick up from dunghills what by a nice chemistry shall be converted to pure gold; and, under the rudeness of Gothic essays, we will find original, rational, and even sublime inventions." And all this, according to Sir Joshua, is "the true and only method by which an artist makes himself master of his profession."

The student must not imagine that there is any hope that he will ever produce anything that is original. If an examiner should suggest to the student that he should try to produce an honest, straightforward design, with none of this Continental nonsense, the student has only to retort that, having studied with diligence the books recommended by the Council of the Royal Institute of British Architects, he is able to quote in answer these words from Sir Joshua Reynolds' *Sixth Discourse*:

*"The mind is a barren soil; a soil which is soon exhausted, and will produce no crop unless it be continually fertilised and enriched with foreign matter."*

CECIL STEWART

## South Eastern Society of Architects Annual Students' Competition: Prize Distribution

THE faint aura of good intentions which tends to cling lugubriously to student competitions was wafted away this year in the air of Brighton.

As befits a place whose pubs are sets discarded from Citizen Kane the atmosphere of the occasion was charged with possibilities. A high-minded audience of close on 150 gathered eventually to hear a criticism of the year's work in the Banqueting Room of the Pavilion, but somehow the spirit of those ancient warhorses Sarah Bunn and Martha Gunn had got abroad. Seriousness as a consequence was hard

put to it to contend with the antics of the scene-shifters.

The proceedings were in three parts. Throughout the day an indefatigable jury toiled in an annexe to "The Prince of Wales Bedroom" to assess Railway Stations and Bathing Pools and the rival claims of a hundred excellent sketches. At 3.30 a horde of students bearing the later-to-be-contested pennants of their rival schools arrived by coach and ancient car, on foot and by cycle, from all over the South-Eastern area to appraise the results. At 5 o'clock tea was served under the palm-leaved dome below and the slaves who before had laboured to make screens ready in the Conference Room above now set to work anew to lug them down the cast-iron bamboo stairs. Small wonder they were hardly ready when the proceedings opened or that as the latter ran on they would from time to time in Shakespearian fashion ring the changes, turning the battlements of Elsinore into a graveyard and measured drawings into testimonies of study. Enlivened in this wise the third and most important part of the affair drew all too soon to its conclusion.

Mr. Peter Shephard gave the criticism—one worthy to stand in line with those others by Hugh Casson and Edward Mills—easy yet searching, kindly but full of wise caution and counsel. He spoke of the need for speed in execution, of the importance of making a drawing a client can understand, of sketching always and not only for show, of the value of measured drawing in the formation of an understanding of what lines on paper really do and may stand for and, when he replied to Mr. F. E. Green's vote of thanks, of the boggy of public and private practice.

The President, Mr. Cecil Burns, gave the prizes, a witness in himself to his own expressed belief that architecture is one of the happiest professions.

The Hon. Secretary proposed a vote of thanks, the Chairman, Mr. Edgar Bunce, rounded all off neatly and the audience dispersed into the light bedecked Steyne to where Sir William Chantrey's supercilious Victoria keeps company with the ubiquitous Regent in his later robes as king and both stand watch beside the most fantastic building the English ever have or ever will produce.

The winners of the competitions were:—

*Senior Design*, "A Country Railway Station": 1st, Ivor G. Berresford, Canterbury; 2nd, Guy M. Wickens, Canterbury. *Junior Design*, "A Private Bathing Pool": 1st, D. Evans, Brighton; 2nd, Ian T. Liddell, Canterbury. *Senior Measured Drawing*: Consolation Prize, John B. Croxford, Rochester. *Junior Measured Drawing*: 1st, A. J. Ickeringill, Brighton; 2nd, E. Belchambers, Canterbury. *Best Inter, Testimonies*: R. L. Guy, Brighton. *Best Final Testimony*: Michael J. Blee, Brighton. *Sketches*: 1st, T. J. Randle, Brighton; 2nd, C. C. Neville, Canterbury.



*See*  
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OF LIGHT  
*at the*  
BUILDING  
EXHIBITION

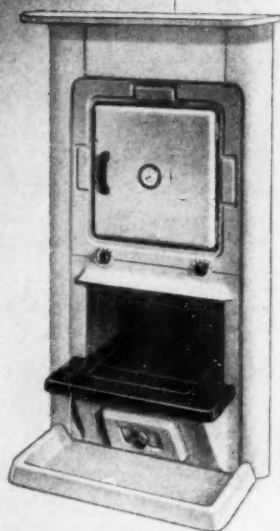


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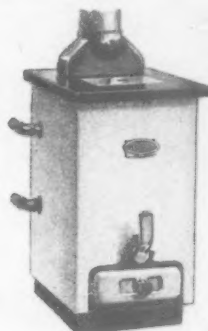
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# News of the BUILDING INDUSTRY

THE MINISTER OF HOUSING and Local Government, Mr. Harold Macmillan, has appointed Mr. J. R. Bevins, M.P., for Liverpool, Toxteth, to be his Parliamentary Private Secretary.

THE NATIONAL FEDERATION OF BUILDING TRADES EMPLOYERS has given a lead to Building Firms, following the Building Working Party's suggestion that "an adequate costing system is an essential factor in management."

On November 14 "Accounting and Costing Systems for Small and Medium-sized Builders" prepared by the N.F.B.T.E. was published, price 5s, by the Builder Ltd., Catherine Street, Aldwych, W.C.2.

A CHART showing the organization of the Building Industry at National level and setting out clearly the inter-relationship of different groups has been issued by the N.F.B.T.E.

LONGLEAF PITCH-PINE—the first post-war shipment, so we are informed by Mallinson & Eckersley Limited—has arrived in this country. This timber comes from the Bahamas and is denser than American pitch-pine but is not available in such large sizes.

THE HOUSING PROGRESS REPORTS presented to Parliament on November 7 as White Papers show that the number of permanent houses completed in Great Britain during September was 17,168 compared with 14,747 in August, 15,965 in July, and with 17,398 in September, 1950.

The total number of houses completed under the post-war programme is now 1,118,630 (961,484 permanent and 157,146 temporary).

CORNISH GRANITE is the title of a fascinating and instructive film which was shown recently by Cornish Granite Films Ltd., for the Devon and Cornwall Granite Masters Association.

The film was sponsored by the following firms: John Freeman & McLeod, Ltd.; William Griffiths & Co., Ltd. (Kit Hill); Western Counties Granite Co., Ltd.; Cornish de Lank Granite Quarries; William Nankivell & Sons, Ltd.; Edward Spargo, Ltd. all of Cornwall—in conjunction with Cooper Wettern & Co., Ltd., Croydon; Brookes Ltd., London, S.W.1; Fenning & Co., Ltd., Hammer-smith, W.6; A. & F. Manuelle, Ltd., Greenwich, S.E.10.

Commencing with shots of Launceston Church which show granite as a major building material over 800 years ago, the film demonstrates the sequence of quarrying from the extraction of the raw material in rough blocks through the various stages of dressing by skilled craftsmen to the final delivery of the blocks on the site itself, typically represented by the new river wall on the South Bank of the Thames.

This wall, which has been carried out entirely in Cornish granite, of which over 3,500 tons have been delivered from the

Cornish Quarries, was dressed in Cornwall by Cornish masons and it stands as a permanent tribute to the enduring qualities of British craftsmanship.

In addition, the film shows the use of granite as a facing material for buildings of all types and sizes, and stresses the varied types of finish, ranging from the rock-faced surfaces to the finished slab with a high-gloss finish.

THE DRY ROT TOURING EXHIBITION visits to Kingston, Croydon and Rochester, which were postponed in order to free the halls concerned for General Election purposes, have now been arranged for the following dates:—

Kingston—December 7th-15th, Guild Hall.

Croydon—January 16th-24th, Council Chambers.

Rochester—January 30th-February 7th, Corn Exchange.

It is hoped to arrange for the exhibition to be opened in London at the close of its tour.

THE BUILDING INDUSTRY cannot be turned on and off like a tap if the best type of men are to be retained and if full productivity is to be achieved. Mr. A. E. Stevens, a member of the National Council of the F.M.B. said this in a speech to the Annual Conference of the Federation's Midland Region on November 10. Commenting on the Chancellor of the Exchequer's announcement on the economic position, Mr. Stevens said that the Federation agreed that housing must be number one priority subject only to the overriding priority of defence. But the industry must not get out of balance. While deferment of building for a few months was in the National interest it should be remembered that individual firms have to keep their craftsmen in full employment.

"HARDWOODS FOR BUILDING AND GENERAL PURPOSES," published by H.M.S.O. for D.S.I.R., price 1s 3d (30 cents U.S.A.) by post 1s 4d, is intended for the guidance of builders, building contractors, furniture manufacturers, and others. The leaflet gives in alphabetical order and tabular form the trade and botanical names of more than a hundred hardwoods together with particulars of their outstanding characteristics and uses. The principal sources of supply, dry weights and degrees of resistance to decay of the hardwoods are also given. As many of the trade names in current use are unfamiliar to users an index of the principal trade names applied to the timbers is provided. A foreword emphasizes the importance of seasoning hardwoods before use and also mentions some of the ways in which damage by insects can be avoided. Samples of more than seventy

of the hardwoods mentioned in the leaflet are being shown on the D.S.I.R. Stand (No. 451) at the Building Exhibition. Visitors can examine the samples and obtain information about any of the hardwoods in which they are interested.

A LIFT INSTALLATION that incorporates many features designed to ensure quicker delivery of passengers, economy in the use of power, and a resistance to wear and tear, has been built by the Express Lift Co., Ltd., in the first section of the New Government Offices, Whitehall Gardens, London, now nearing completion. The installation comprises a bank of four interconnected passenger operated lifts at each of the two main entrances, each lift in a bank operating in combination with the other three. Features include: (i) calls answered in rotation for the direction of travel irrespective of the sequence in which they have been registered, (ii) the first car in the bank of lifts (travelling in the direction required) to reach the floor from which a call has emanated, will answer the call, which cannot be cancelled until answered, (iii) an automatic weighing device enables the car when full, to by-pass any landing calls, (iv) the departure of lift cars can be speeded up to suit the flow of passenger traffic, (v) car doors are each fitted with a safety edge; when closing the slightest pressure on either of these edges reverses the doors' direction of travel causing them to open. After a short delay, the doors will again close.

Each lift has a capacity of 24 people with a maximum car speed of 500 ft/min.

THORN ELECTRICAL INDUSTRIES LTD. announce revised prices on all Atlas fluorescent lighting fittings and control gear, operating from November 19.

These prices consolidate the 5 per cent increase announced last May and in a few cases there is a further slight advance. The new prices are included in the new Atlas Fluorescent Lighting Handbook—AL/104 obtainable on request from the Company's offices at 233, Shaftesbury Avenue, London, W.C.2.

THE RECENTLY FORMED SCOTTISH INDUSTRIAL GROUPS ADVISORY COUNCIL will be holding a one day conference on industrial safety on November 29. The conference, which is being organized by the Royal Society for the Prevention of Accidents, will be held in the Banqueting Hall, City Chambers, Glasgow.

TAKING ADVANTAGE of the new Act which enables them to spend up to a 6d rate in providing public entertainment, Worktop, Notts, Borough Council are to embark on the reconstruction of their 1851 Town Hall building and the scheme, estimated to cost £70,000, will include a theatre which will accommodate between 350 and 400 people.

THE DAILY MAIL IDEAL HOME EXHIBITION of 1952 will be held at Olympia from March 4 to March 29.

## CORRECTION

We regret that the winch shown on page 560 of last week's issue was wrongly described. The makers A.C.E. Machinery Ltd. have a new electric winch but the wrong photograph was published.

## CORRESPONDENCE

To the Editor of A. & B.N.

Dear Sir,—I was very interested to read the article on exhibition stand design in the November 1st issue of the "Architect & Building News."

I feel I cannot let the criticism of my design for the British Nylon Spinners' stand for the B.I.F. go unanswered—not that I disagree entirely with the comment on the effect of steps on an exhibition stand. However, there are many instances in exhibition planning where steps are required as a resistance to the public entering areas intended for buyers and representatives.

In this particular case the stand was primarily designed on two levels in order to make a striking difference between the exterior and interior structure, and a more imposing entrance to the lounge and general office which were more than half the site area of 2,000 square feet.

The photo which was reproduced\* showed steps which were placed only 3ft from the main gangway. They not only led into the centre of the exhibition area but added interest in circulation. In fact, the effect was that of a promenade allowing the public to see the exhibits from two levels.

GEORGE COLLETT (M.S.I.A.).

★ The photo referred to is reproduced herewith. Mr. Chabot's comment was "the reason for introducing the four steps is not apparent, since a step is THE arch resistance-producer. It would perhaps have been preferable to adopt some other means of access."



## ACCOUNTING AND COST CONTROL—3

By S. Howard Withey, F.Comm.A.

For costing purposes building operations should be broken down, and although each builder has his own peculiar problems that cannot be solved on universal lines it is possible to indicate the broad and essential principles upon which costs should be compiled, and in that light to suggest means of approach to some of the main difficulties which must be overcome in any attempt to institute a standard system of accounts and costs in the industry.

The cost of any job, operation or building contract, consists of wages paid to operatives engaged in the various depot workshops, such as the sawmill, setting-out shop, woodworking machine shop, joiners' shop, painting and polishing shop, etc., the cost of structural and other modifications and the outlay in the form of stone, bricks, cement, sand, tiles and slates and other materials, also nails and bolts and ironmongery, and in addition to the prime cost a multitude of fixed and variable expenses have to be covered. In an analysis of total costs the following expenses may be treated as relatively fixed:—

Rent, rates and insurance of the premises at the building sites, head office and workshop depots;

Upkeep of workshops and business premises;

Depreciation of business buildings;

Upkeep and maintenance of mixers, pumps, winches, hoists, elevators, saws, drills, block-making and other machines, plant and equipment;

Depreciation of productive assets;

Heating and lighting;

Stock and other insurances;

Administration expenses.

Builders are far from unanimous in regard to the most satisfactory basis upon which to allocate these more or less fixed expenses, but the total expenditure under the heading of "Rent, rates and insurance

of the premises at the building sites, head office and workshop depots," and the cost of "Upkeep of workshops and business premises" can be readily ascertained by referring to the individual accounts in the nominal or expenses ledger and may be distributed over the operations according to occupied floor space. Some builders show the cost of property repairs and the cost of plant repairs on the debit side of a general repairs and renewals account, but as a rule it is advisable to open two accounts; when property repairs are charged to profit and loss only the net assessment under Schedule A, and not the gross assessment, will be recognized.

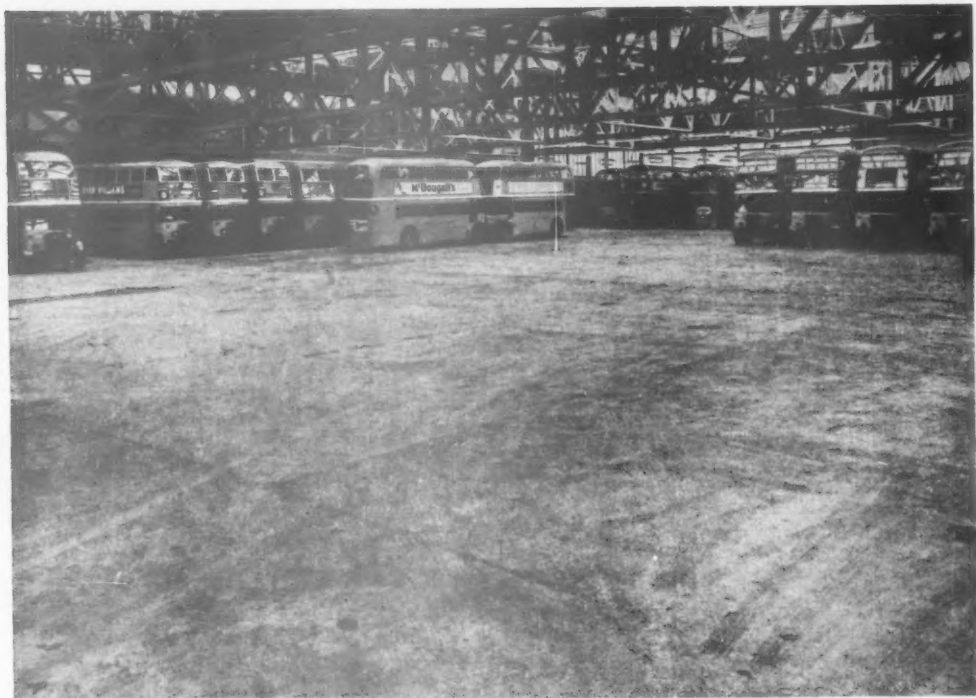
In regard to depreciation, various methods of computing and recording the periodical debits are in operation at the present time, and as applied to business premises an equal proportion of the original capital cost is usually written off each year and included in the costs, but amounts set aside to provide for diminution in the value of land should be shown under a separate heading in the accounts and excluded from the building costs. In those cases where the cost of repairs and renewals to plant and equipment does not show any material variation as between one working period and another, the straightline method of determining the extent of depreciation for inclusion in the costings is usually satisfactory, and during periods of rising costs and when plant maintenance charges are increasing the combined charge for depreciation and upkeep can be equalized by applying the percentage method whereby a fixed rate is written off the book value each year in such a way that the combined charge for depreciation and maintenance is equalized over the period of service or useful life.

It is important that proper distinction should be drawn between items of expenditure to be included in costs and outlay which has the effect of increasing the total

value of the productive assets, and although as applied to specific transactions the principles governing discrimination may not be clearly defined, a special effort should be made to ensure the greatest possible accuracy in the original records. When an additional business is taken over as a going concern, with the premises, yards, machines, loose plant, stocks, work-in-progress and goodwill, etc., the entire expenditure involved should be treated as capital outlay to be classified under definite headings for ledger-posting purposes. In addition to the cost of acquisition, any legal or professional expenses incurred in connection with the transfer of business property may be debited to the asset account and included on the balance sheet, but it is advisable to write off such expenses as quickly as possible. Expenditure which adds to the capital cost of a productive asset or group of profit-earning equipment may be capitalized for the time being, but all such items should be adequately provided for in the costings, and while the cost of repairs to buildings is a direct charge against the operations, the amount involved should be treated in the books as capital outlay if the repair work has had the effect of raising the capital value of the property as between a willing buyer and a willing seller. This applies also to wages paid to operatives who have been engaged on repair work.

Payments in the form of ground rent will be posted direct from the cash book to the debit side of the nominal account and will not appear in the asset account, and in the case of leasehold property a proportionate part to cover depreciation in the value of the lease arising from the passage of time should be included in the costings. Where it is found necessary or desirable to undertake major repairs or adjustments to reconditioned or second-hand building equipment to ensure efficiency for a specific contract or job, the

[Continued on page 611.]



ARCHITECTS: Adie Button & Partners, F./R.I.B.A.  
CONTRACTORS: Plastering Limited, London, S.W.2.

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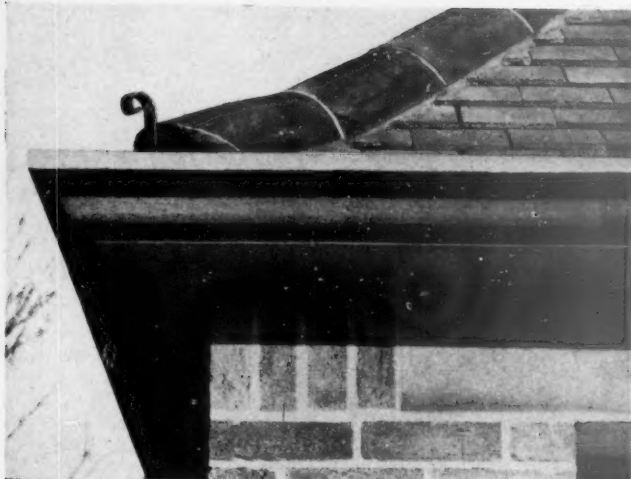
For further details write to me for Bulletin No. 3.

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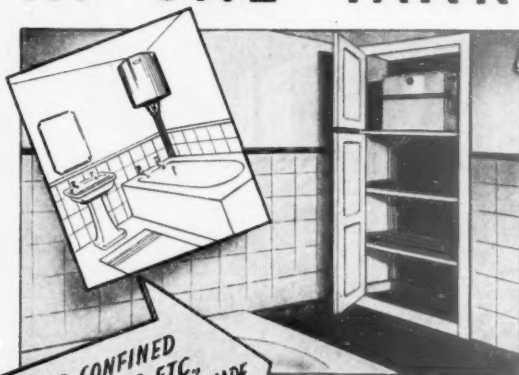
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# GOOD, BAD OR INDIFFERENT?

By A. FOREMAN

## At the Building Exhibition

THIS should be a real bi-annual education for all of us because in normal times we are too busy to discuss any but the most pressing subjects of the moment with the travelling salesmen or to examine the literature which rains into the office; whereas we go to Olympia with half or even a whole day in front of us devoted to looking for information. In some sections of the industry there are not many exhibits or even none at all, but in others the display is a thoroughly representative cross-section. My main impression was the enormous size and variety of the exhibition, which seems to grow every time, but this time far more than usual; it is now becoming very difficult for the average visitor, who can only spare, at the most, a day at the exhibition to see properly the whole of the exhibits; to overcome this difficulty I found it necessary to give only slight attention to those products I know well, just to be sure that there had been no great change or important development and to ignore almost completely those goods which I can see at any time in displays at my local merchants, thus concentrating my time on the larger plant, heavier materials and new developments. It is most helpful to be able to see and to handle at first hand so many of the articles one knows of through the building press. A full-scale example is so much more informative and particularly if it is equipment, be it a ladder, a shovel or a concrete mixer, and, in the case of the large equipment, since travellers cannot possibly bring round samples from which we can gauge the quality and especially the workmanship of the goods which indicate their likelihood to stand up to site conditions.

This week's notes are confined to certain general matters which struck me as I walked round, and next week I am proposing to mention a number of more detailed points.

A matter which always bothers me about exhibitions is that frequently the articles displayed have been selected so carefully that they may no longer represent the bulk of the production as it reaches the users, or alternatively they have been cleaned up, polished or painted, with the result that it is difficult to judge them in relation to normal supplies.

I had decided to look in particular for displays of methods or appliances for reducing manpower and also alternative methods or materials which would speed up building. While some methods I have met may speed jobs on site by transferring the work to the factory, this is only useful if the overall cost, when fixed complete, is reduced; one of the advantages of doing work on site, which is often overlooked,

is that the overhead expenses and capital charges are so much less than those of factories. In the examination of materials alternative to those traditionally used it is most important to examine them from the aspect of maintenance after fixing and trouble-free durability. I am always a little nervous about using large building units, towards which we seem tending to move, as I find the more numerous joints of small units tend to spread better the effect of movement and shrinkage; the handling of and risk of damage to large units have also to be considered most carefully.

As a member of the using end of the building industry visiting this exhibition, there is one thing above all I would plead for as we all collect literature and the exhibitors seem to want to make us have it; would it not be better if agreement could be reached between the exhibitors for a standard size to facilitate its easy removal and its ultimate storage for reference? I commend the idea to the organizers. I seem to remember some years ago seeing some words on a catalogue to the effect that it complied with some standard sizes—isn't it possible to do this generally? Further, could the literature confine itself to giving the essential information one wants to know together with name and address of the firm, thus cutting down the less useful sales talk or "blurb" to a minimum; I am sure it would not only save much paper for better uses, but would help sales as it is less likely to reach the waste-paper basket so quickly.

Another matter I would like to bring to the attention of makers is the desirability of giving, as part of their exhibits and in sales literature, more information regarding the correct use and proper installation of their goods. Educational matter is always appreciated.

On a number of occasions in these notes I have commented on the need to tell users which components and materials comply with the British Standards they find quoted in the specifications to which we have to work. So it was very gratifying to find an increasing number of exhibits bearing labels indicating compliance with some B.S., a fact which could be duly noted. If the makers have really started to give us this information I do hope they will extend the practice, as it helps to make life easier for the architect, surveyor and builder. I hope also it will creep into makers' catalogues and through these into merchants' catalogues and showrooms. It was interesting to see on at least one stand the whole production appeared to be related to British Standards.

While on this subject of B.S., going round a show of this nature makes one realize more and more how badly standardization, and the mass' production

which might follow it, is needed in the industry. Its wider adoption would simplify enormously stock-keeping at builders' yards and, presumably, to a much greater extent, stock-keeping at the distribution stage. The unnecessary multiplication, due often to meaningless variation merely to be different from a competitor, is appalling, and is only too well demonstrated at this exhibition. One cannot, of course, blame makers alone for this state, as they suffer from the demands of the customer, but the maker could do much to discourage the user in relation to those of their own products which ought to be mass produced; for example, taps and valves, the variation of which is legion, have to do the same job everywhere, while there are endless types of joints for copper tubes. Surely we could and should decide which of these many varieties do their respective jobs best and standardize them for everyone's convenience.

One of the features I looked for was the degree of technical progress to be found among the more traditional materials, and I am afraid I saw little which was very specially noticeable. One material development I particularly hoped to find was fibre boards which were pre-treated against risks from dampness.

It might be helpful to the visitor if the exhibits could be better grouped so that each type of visitor could concentrate on those of direct interest to them. For example, architects have little real interest in plant and machines, whereas builders are less interested in those exhibits which are matters of aesthetics, and the joinery maker has little interest in concrete products.

A matter outside my direct interest, but one of national importance, arose from the fact that I joined a table for lunch at which there were two other men who turned out to be buyers from overseas. Both were full of admiration for the exhibition, but they also aired some complaints. First, the omission by many firms to exhibit such of their goods as are suitable for overseas markets; for example, one asked if I had seen any mosquito-proof cisterns. I could not help as I had seen none of these articles. Secondly, they asked why some exhibitors could not, or would not, quote terms in foreign currencies, and why they did not trouble to have foreign-speaking salesmen available at so important an exhibition. Being merchants, they assured me that they were in the market for many types of goods and preferred to deal directly with makers, rather than through export merchants in this country. They said better foreign sales facilities at the exhibition would have saved them much time during their visit to this country as they would now have to spend much time travelling to see firms located over the whole country.

Continued from page 610.]

## ACCOUNTING AND COST CONTROL—3—Continued.

cost is usually debited to the asset account, but ordinary repairs and machine maintenance charges constitute proper debits for inclusion in costs. Sections of equipment are often replaced by machinery designed to guarantee higher productivity, and when this happens the book value of the old equipment should be written off against current operations and the full cost of the new machinery debited to a separate private ledger account.

For purposes of comparison and in order to keep a grip on expenses and charges, it is advisable to ascertain the precise relation which each group of fixed and variable expenses bears to the contract prices. To do this, the items contained in the accounts—such as stocks, purchases, wages, repairs and renewals, heating, lighting, insurances, etc., should be reduced to a common basis, and experience has proved that by taking the net

turnover as representing 100, and determining the exact ratios which the other items bear to that figure, the costs can be resolved into percentages to enable the results to be viewed in clearer perspective than a mere tabulation of monetary figures will allow. Providing the calculations are made in a uniform manner, percentages can be readily compared with those relating to other jobs and contracts, and all ups and downs are revealed in good time.

## LEGAL NOTES

A reserved decision of considerable importance to those engaged in the building trade was recently given by the Lands Tribunal in four rating appeals by the Valuation Officer against decisions of a Local Valuation Court for the Isle of Wight. The facts of each case were identical in all particulars material to the appeals so it is but necessary to refer to one of them.

A firm of builders had contracted with the Isle of Wight County Council in December, 1949, to erect a new school at Newport on a site which was approximately an acre and a quarter in extent. For the purpose of carrying out the contract the builders installed the following huts in January 1950:—

- (1) Foreman's office, sectional and movable, of wood, with felted roof, boarded floor and fitted with a stove, 12ft by 10ft 6in.
- (2) Store, sectional and movable, timber framed corrugated iron with boarded floor, 12ft by 7ft 6in.
- (3) Tool store, sectional and movable, wood, with felted roof and earth floor, 10ft 6in by 8ft 6in (removed February 26, 1951).
- (4) Cement store, breeze block with corrugated iron roof and earth floor, 30ft by 12ft.
- (5) Mess room, breeze block with corrugated iron roof, loose concrete block floor on earth, with fitted heating stove, 30ft by 12ft.
- (6) Petrol store, sectional and movable, wood with felted roof and wooden floor, 8ft by 7ft (removed February 26, 1951).

No electric light was laid on in any of the above huts, all of which, in the view of the Valuation Officer, constituted rateable hereditaments.

By the terms of the contract, although the actual work was more or less under the control of the architect, possession of the site was to be given to the contractor on or before a certain date, and thereupon he was to begin the work forthwith and regularly and diligently proceed with the same to completion. In addition, he was to pay and indemnify the County Council against, *inter alia*, rates and taxes which, if not expressly provided for in the bills of quantities, were to be added to the contract sum.

Now by Section 21 of the Rating and Valuation Act, 1925, there is to be inserted in the valuation list such particulars with respect to every hereditament in the rating area and the value thereof as may be prescribed; and by Section 68 the expression "hereditament" means "any lands, tenements, hereditaments or property which are or may become liable to any rate in respect of which the valuation list is by this Act made conclusive." The particulars to be inserted are prescribed by the Rating and Valuation Acts (Form of Valuation List) Rules, 1932, S.R. & O., 1932, No. 395, and set out in Form A of the Schedule to those Rules. It follows that the primary question for the decision of the Lands Tribunal was whether the builders' huts above described did in fact constitute a "hereditament" of which the prescribed particulars should be inserted in the valuation list, and the Tribunal had no hesitation in coming to the conclusion that it did, basing its decision on the fact that:—

- (a) The contractor was in actual possession of the huts;

- (b) He had exclusive beneficial occupation for the purpose of carrying out the contract;

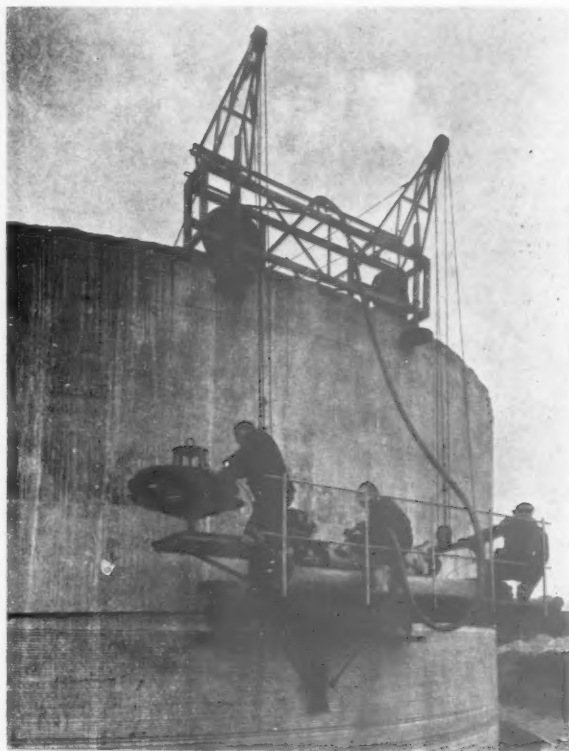
- (c) The possession was of some use and value to him in that he occupied the premises for the purpose of his business; and

- (d) The possession had a sufficient quality of permanence to justify an assessment.

In view of this decision, and, more par-

ticularly, the decision of the Divisional Court in 1948 in the case of *John Laing & Son, Ltd., v. Assessment Committee for Kingswood Assessment Area*, it must now be taken as clearly established that builders' huts which are erected on a site for the duration of a contract are rateable if the carrying out of the contract is going to extend over a substantial period of time.

We are indebted to the *Estates Gazette* for the substance of this report.

C I R C U M F E R E N T I A L  
P R E S T R E S S I N G  
O F C O N C R E T E T A N K S

## THE MERRY-GO-ROUND

Recently several storage tanks of prestressed concrete have been built. This picture shows a method of laying on continuous reinforcement. The wire is drawn from a drum through an adjustable post housing wire-drawing die and clamping device which tensions the wire as the merry-go-round machine, which has solid rubber tyred wheels, crawls round and round the circumference of the tank.

# HILLS

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Illustration shows Hills Lantern Lights on G.P.O. Building, Birmingham, by kind permission of the Ministry of Works.

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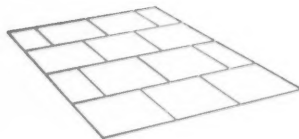


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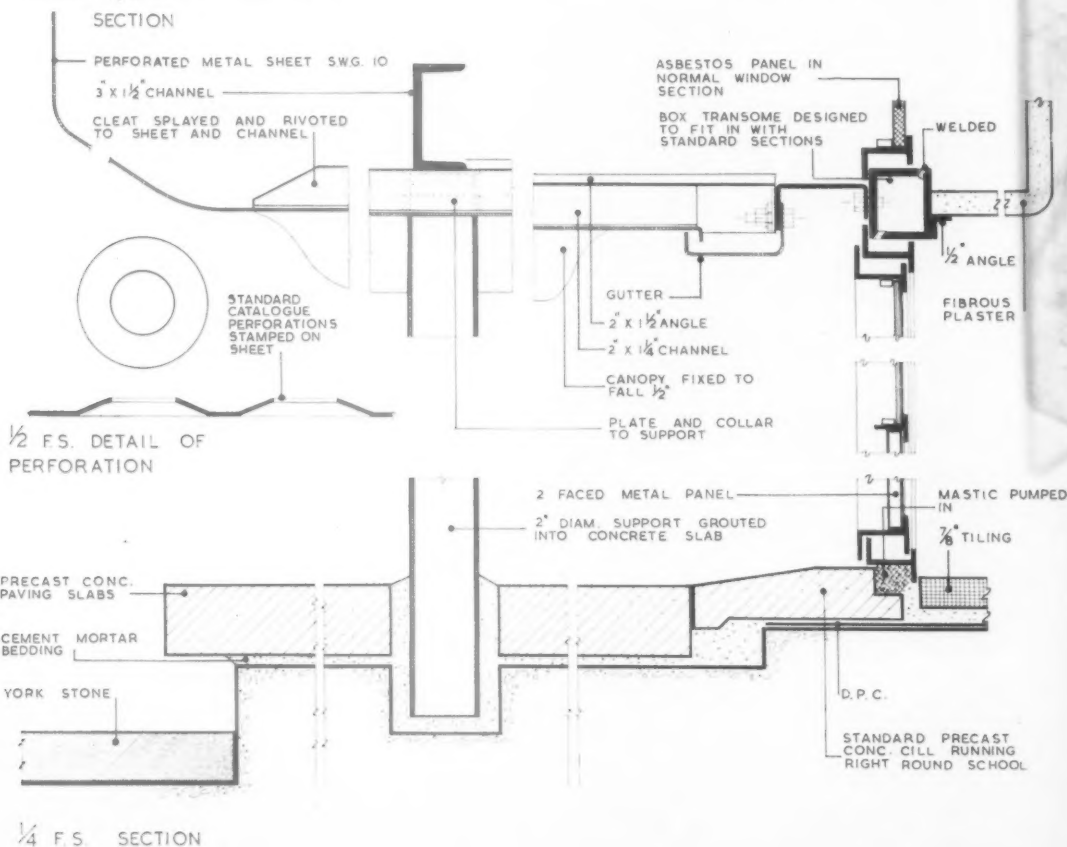
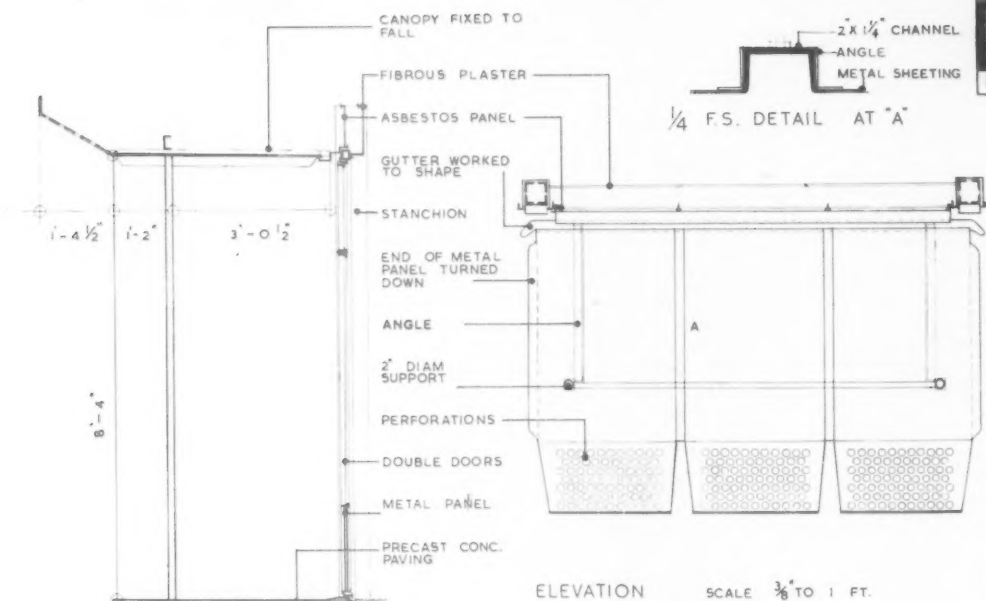
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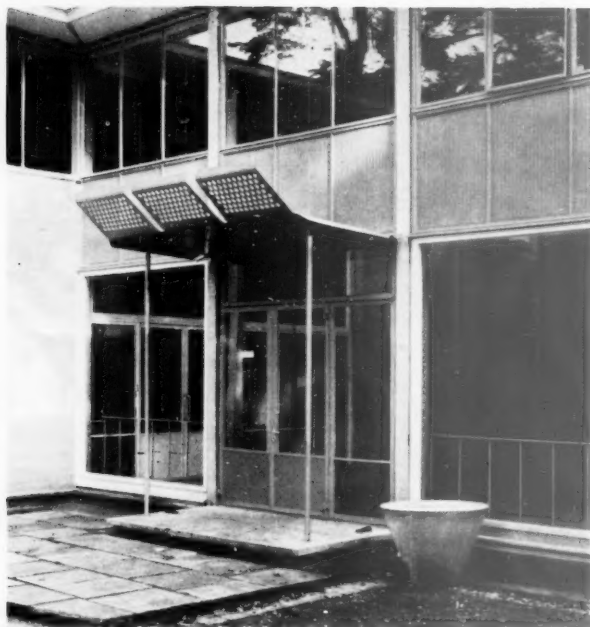
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Notes below give basic data of contracts open under locality and authority which are in bold type. References indicate: (a) type of work, (b) address for application. Where no town is stated in the

## CONTRACT • NEWS •

### OPEN

#### BUILDING

\***MACCLESFIELD B.C.** (a) Scheme 7a. 6 aged persons' dwellings in blocks of two at Hurdfield. (b) Borough Architect, 3, Jordangate. (c) 2gns. (e) Dec. 12. See page 40.

\***BARNACK R.C.** (a) 6 houses. (b) Messrs. F. J. Lenton and Partners, 16, Broad Street, Stamford. (d) Nov. 27.

\***BEDFORDSHIRE C.C.** (a) 2 pairs and 1 police house at Riddy Lane, Luton. (b) County Architect, Shire Hall, Bedford. (e) Dec. 8.

\***BIRKENHEAD B.C.** (a) Prenton primary school (Orbit construction). (b) Borough Architect, 25, Hamilton Square. (c) 2gns. (e) Dec. 3.

\***CARMARTHENSHIRE C.C.** (a) Junior school at Llannon, nr. Llanelly. (b) County Architect, County Hall, Carmarthen. (c) 3gns. (e) Dec. 11.

\***CARMARTHENSHIRE C.C.** (a) Aged persons' home at Rhyd-y-Gors, Johnstown. (b) County Architect, County Hall, Carmarthen. (c) 3gns. (e) Dec. 11.

\***CHESTERFIELD R.C.** (a) Store, staff accommodation and cleansing and salvage depot at Loco Brook, Pilsley. (b) Council's Engineer, Rural Council House, Saltergate. (c) 2gns. (d) Nov. 30.

\***CHESHUNT U.C.** (a) 86 dwellings in Hillview Gardens. (b) Messrs. Clifford Culpin and Partner, 3, Southampton Place, London, W.C.1. (c) 2gns payable to Council. (e) Dec. 17.

\***CREWE B.C.** (a) Contract No. 503. 14 shops with 12 flats above in Elm Drive, Middlewich Street Estate. (b) Borough Engineer, Municipal Buildings. (c) 2gns. (e) Dec. 10.

\***CUMBERLAND C.C.** (a) Laboratory and classroom block at the White House School, Brampton. (b) County Architect, 15, Portland Square, Carlisle. (e) Dec. 4.

\***DUNMOW R.C.** (a) 3 pairs of houses with external services at Bran End Fields, Stebbing. (b) Council Offices, Dunmow. (c) 3gns. (e) Dec. 3.

\***DURHAM C.C.** (a) Primary school at High Usworth. (b) County Architect, Court Lane. (e) Dec. 3.

\***DURHAM C.C.** (a) Ambulance station at New Herrington. (b) County Architect, Court Lane. (d) Nov. 28.

\***DURHAM C.C.** (a) Improvements and repairs to Swalwell County School and playground alterations at Ramshaw County School. (b) County Architect, Court Lane. (e) Dec. 3.

\***DURHAM COUNTY POLICE AUTHORITY.** (a) 4 pairs and 2 houses, Red Hills Estate. (b) Police Authority Architect, Court Lane. (e) Dec. 4.

address it is the same as the locality given in the heading. (c) deposit, (d) last date for application, (e) last date and time for submission of tenders. Full details of contracts marked ★ are given in the advertisement section.

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**EASTBOURNE B.C.** (a) 32 flats in 2 blocks at junction of Victoria Drive and Central Avenue. (b) Borough Surveyor, 2-4, Saffrons Road. (c) 2gns. (d) Dec. 1.

**ERITH B.C.** (a) 48 houses and 4 aged persons' bungalows, Matfield Road site. (b) Borough Engineer, Town Hall. (c) 2gns. (e) Dec. 10.

**ESSEX C.C.** (a) Grammar school at Hornchurch (approx. value of contract £207,000) and the Lennard secondary school at Ockendon (approx. value of Contract £174,000). (b) County Architect, County Hall, Chelmsford. (d) Nov. 28.

**GAINSBOROUGH U.C.** (a) 41 houses (groups of 12, 5 and 24) and site works on the White's Wood Lane site. (b) Messrs. Wm. Saunders and Partners, 24, Castle Gate, Newark-on-Trent. (c) 3gns payable to Council. (e) Nov. 30.

**GRANTHAM B.C.** (a) Scheme 24, 15 houses. Scheme 25, 18 houses, at Harrowby Lane and Belton Lane. (b) Borough Surveyor, Guildhall. (c) 2gns. (d) Nov. 26.

**HARROW U.C.** (a) (1) 36 aged persons' flats on Woodlands Estate, Stanmore, and (2) 40 dwellings on Rayners Lane Estate, Harrow. (b) Council's Engineer, Council Offices, "Cottesmore," Uxbridge Road, Stanmore. (c) £2 each contract. (e) Dec. 14.

**HUNTINGDON C.C.** (a) Conversion of grammar school and erection of new block for school at Ramsey. (b) County Architect, County Buildings. (e) Dec. 10.

**KINGSTON R.C.** (a) (1) 12 houses and (2) site works at Winforton. (b) Council's Surveyor, Council Offices, 2, High Street.

**LANCHESTER R.C.** (a) (1) 10 houses and (2) construction of road and sewers at Castleside. (b) Council's Engineer, Council Offices. (c) 2gns each contract. (e) Nov. 30.


**LONDON-BRENTFORD AND CHISWICK B.C.** (a) 6 flats, Oxford Road, Chiswick. (b) Borough Engineer, Town Hall, W.4. (c) 3gns. (e) Dec. 3.

**LONDON-HENDON B.C.** (a) 7 houses, 46 flats and 8 maisonettes at Site No. 33, Northway Circus, Mill Hill. (b) Borough Engineer, Town Hall, N.W.4. (c) 3gns. (d) Nov. 24.

**LONDON-LEYTON B.C.** (a) (1) 27 maisonettes and flats at the Park Grove Road Redevelopment Area, (2) 6 flats in Leslie Road, and (3) standard flatted houses on various sites. (b) Borough Engineer, Town Hall, E.10. (c) £2 each contract. (d) Nov. 24.

**LONDON-SOUTHGATE B.C.** (a) 1 pair of foremen's houses in Grovelands Park, N.21, and Oakwood Park, N.14. (b) Borough Engineer, Town Hall, Palmers Green, N.13. (c) 2gns.

**LONDON - WALTHAMSTOW B.C.** (a) (Scheme A) 5 shops with maisonettes above and 8 lock-up garages at Bulls Farm, Billet Road, E.17. (Scheme B) 24 flats at 2 corner sites at junction of Grosvenor Park Road with Hoe Street, E.17. (Scheme C) 10 flats at junction of St. Barnabas Road with Boundary Road, E.17. (b) Borough Architect, Town Hall, E.17, separate applications for each scheme. (d) Scheme A, Nov. 27. Schemes B and C, Dec. 3. (e) Scheme A, Dec. 12. Schemes B and C, Dec. 17.



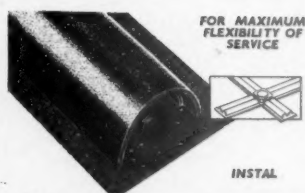
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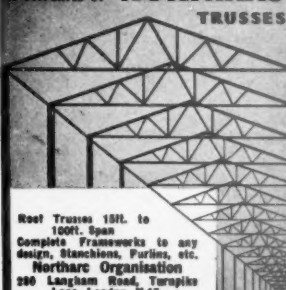
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**LONDON-WANDSWORTH B.C.** (a) 5 3-storey blocks of flats (48 dwellings) at West Hill Road, Southfields. (b) Town Clerk, Municipal Buildings, S.W.18. (d) Nov. 28, with details of experience, plant, etc., and names of two technical and financial referees.

**LOTHINGLAND R.C.** (a) 8 houses, Coast Road, Hopton, and 4 houses at Colman Road, Corton. (b) Council's Clerk, Council Offices, Rectory Road, Lowestoft. (c) 2gns. (d) Nov. 23. (e) Dec. 17.

**MARKET HARBOUROUGH R.C.** (a) 8 houses at Hallaton. (b) Council's Clerk, Council Offices, 42, High Street. (c) 2gns. (e) Dec. 3.

**NEWCASTLE-UPON-TYNE C. AND C.C.** (a) 1,000 flats in multi-storeys on Unit No. 4 of the Longbenton Estate. (b) City Architect, 18, Cloth Market. (c) 5gns to City Treasurer. (e) Jan. 3, 1952.

**N. IRELAND-GOVERNMENT OF NORTHERN IRELAND.** (a) Factory at No. 6 site, Castlereagh Factory Estate, Belfast. (b) Ministry of Commerce (Room 34C), Chichester House, Chichester Street, Belfast. (c) £10. (e) Dec. 11.

**NOTTINGHAM C.C.** (a) Secondary schools in Wollaton Park. (b) City Engineer, The Guildhall. (c) £2. (e) Dec. 12.

**OLDHAM B.C.** (a) Occupation centre for mental defectives at Cardwell Street. (b) Messrs. Heywood and Ogden, 12, Clegg Street. (c) 2gns. (e) Dec. 3.

**PORTSMOUTH C.C.** (a) 8 bungalows in Gloucester Street, 8 bungalows and 4 flats in Duke Street and 16 flats in Radnor Street. (b) City Architect, Municipal Offices, 1, Western Parade. (c) 2gns. (d) Nov. 24.

**PORTSMOUTH C.C.** (a) Contract No. 2. 56 flats in the Nelson Road Development Area. (b) Messrs. A. E. Cogswell and Sons, Prudential Buildings. (c) 3gns. (d) Nov. 24.

**REIGATE B.C.** (a) 6 maisonettes at The Crossways, Merstham. (b) Borough Engineer, Town Hall. (c) 2gns. (e) Nov. 30.

**ROMFORD B.C.** (a) 64 houses and 4 bungalows on the Fuller's Farm site. (b) Messrs. A. S. Wilson and Partners, 8, Princes Street, Storey's Gate, London, S.W.1. (c) 3gns. (e) Dec. 17.

**RUSHDEN U.C.** (a) 44 houses on the Upper Queen Street Estate. (b) Engineer and Surveyor, Council Buildings. (c) Dec. 14.

**SALFORD C.C.** (a) Temporary hatted classroom block (prefabricated) at Fairfax Street, Trafford Road, for Trafford Road Girls' School. (b) Messrs. Halliday and Agate, 14, John Dalton Street, Manchester, 2. (c) £2. (e) Nov. 30.

**SPARKHILL (BIRMINGHAM) METHODIST CHURCH.** (a) Structural Contract No. 1. Erection of vibrated reinforced concrete foundations, retaining walls, framework, etc., for erection of assembly hall, Sunday school, Caretaker's flat, etc., at Sparkhill. (b) Messrs. Botley and Chaffer, Newton Chambers, 43, Cannon Street, Birmingham, 2. (c) 3gns. (e) Dec. 7.

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**WARE U.C.** (a) Contract No. 12. 17 houses on the Presdales Estate. (b) Engineer and Surveyor, The Priory. (c) 3gns. (e) Dec. 3.

**WEST SUSSEX STANDING JOINT COMMITTEE.** (a) Job No. 3008, 4 police houses and roadway at Greenway, Horsham. Job No. 1946, 4 police houses at Wickbourne, Littlehampton. Job No. 3009, 5 police houses and garage at Rodean Road, Worthing. (b) County Architect, County Hall, Chichester, stating schemes. (d) Nov. 26.

**WHITBY U.C.** (a) 32 houses in Helredale Road. (b) Messrs. Peacock and Bewlay, 224, Hagley Road, Edgbaston, Birmingham, 16. (c) 2gns. (d) Nov. 24.

## **PLACED**

Notes on contracts placed state locality and authority in bold type with (1) type of work, (2) site, (3) name of contractor and address, (4) amount of tender or estimate. † denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

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**BIRMINGHAM.** (1) Conversion into club and hostel of Metropole Theatre, for Y.M.C.A. (2) Snow Hill. (3) C. Bryant & Son, Whitmore Road, Small Heath, Birmingham. (4) £90,000. Architects: W. H. Weedon and Partners, Edgbaston, Birmingham.

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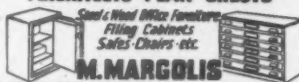
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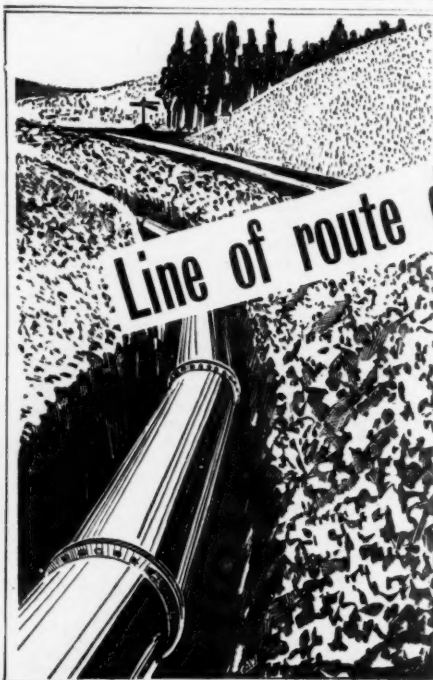


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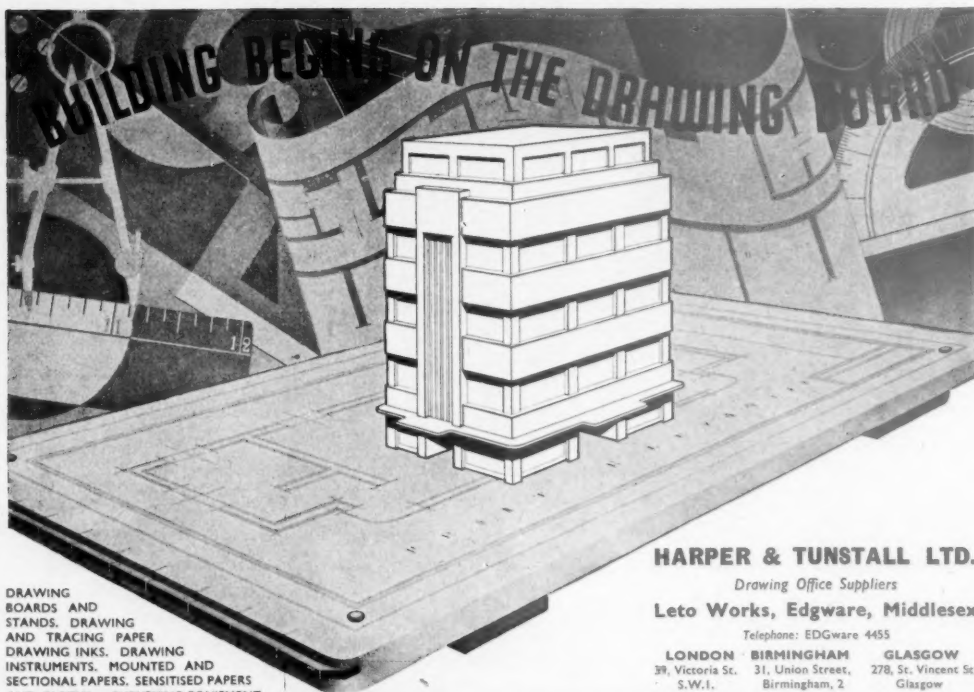
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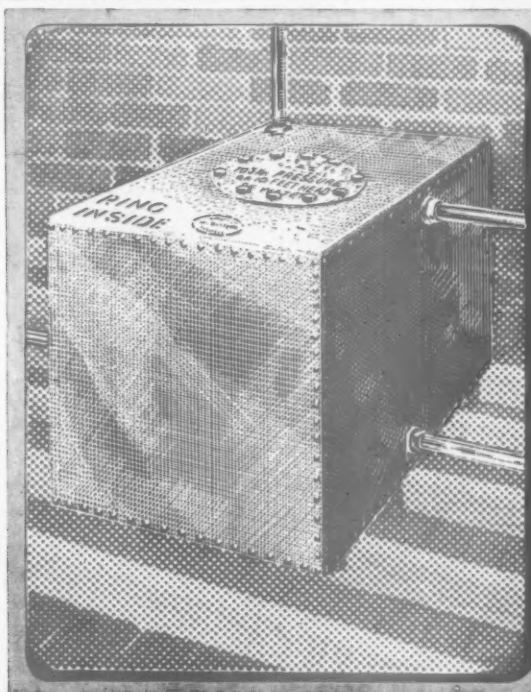
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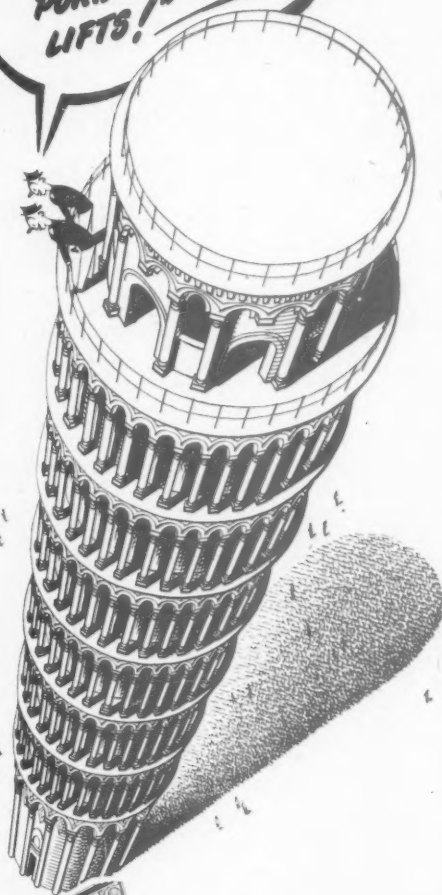
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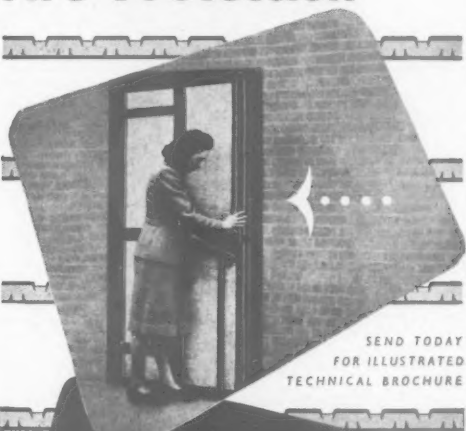
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Fire Resisting

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*Keep Fire at Bay the DURASTEEL Way!*

# an invitation to see in action the modern method of **WHOLE-HOUSE WARMING**

VISITORS TO THE BUILDING EXHIBITION are cordially invited to see the Radiation Whole-house Warming System in action at the experimental houses at Stanmore. Please get in touch with the Whole-house Warming Department, of Radiation Group Sales Limited, Lancelot Works, Wembley, Middlesex, Telephone: Wembley 6221, for arrangements for your visit to be made.  
A model of the system will also be on display on the C.U.J.C. Stand at the Exhibition.



Whole-house Warming  
by **Radiation**  
ducted air

Radiation Whole-house Warming by ducted air ensures a pleasant, healthy temperature from floor to ceiling in every room and every passage in the house. The system may incorporate either a fully automatic gas unit, or a solid fuel appliance which burns, without smoke, any solid fuel including bituminous coal.

Issued by Radiation Ltd., Aston, Birmingham 6, & 7-8 Stratford Place, London, W.1



## FIRE-ESCAPE STAIRS



We have made and erected fire-escape stairs for the last 60 years all over Britain for:—

Government Buildings  
Local Authorities  
Hospitals  
Office Blocks  
Theatres, etc.



The fire-escape stairs shown here are typical of many made and erected by Lion Foundry



Nothing equals perforated cast-iron treads and landings for resistance to wear and weather

**LION FOUNDRY CO. LTD.**  
**ARCHITECTURAL & SANITARY IRONFOUNDERS**

(CONTRACTORS TO H.M. GOVERNMENT)

**KIRKINTILLOCH, Near GLASGOW**

London Office: 124 Victoria Street, S.W.1

Telephone: VICTORIA 9148

## Expert treatment of timber decay

Whether caused by fungal rot or insect borers, timber decay must be promptly diagnosed by specialists and arrested before irreparable damage is suffered and expensive replacement necessary. Not only have Richardson & Starling evolved chemical control materials and methods of application, but they have a highly trained staff to carry out effective treatment, ensuring complete success in combating Dry Rot, Death Watch, Lyctus or Furniture Beetles.

### DEATH WATCH BEETLE



*A rafter in the roof of  
Chichester Cathedral  
showing damage by  
the Death Watch  
Beetle.*

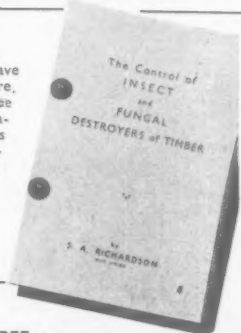
The insidious workings of the Death Watch Beetle are often not apparent until serious damage has been done. Only the scientific use of a penetrating and persistent insecticide will eradicate these borers. "WYKAMOL" polychlorophthalene can be confidently recommended and the experience and technical skill of our staff is at your disposal.

### WYKAMOL INSECTICIDE

### DRY ROT

Some species of this fungal rot have the destructive effect of a slow fire. Even the virulent Merulius can be eradicated by "RESKOL" Pentachlorophenol Solution, but unless the characteristics of these insidious growths is fully known you should employ experts to be certain of success.

### RESKOL FUNGICIDE



This informative  
booklet **SENT FREE** on request.  
"THE CONTROL OF INSECT AND  
FUNGAL DESTROYERS OF TIMBER."

For further advice and details write to:

**RICHARDSON & STARLING LTD.**

Members of the British Wood Preserving Association

**HYDE STREET, WINCHESTER. Tel: 2537**



## THE NEW MUREX TYPE 50 TRANSFORMER for light engineering work

This new Murex 45 amp. set is the latest addition to the range of Murex transformer arc welding equipments. The set is self-contained, air-cooled, small in size and compact. It has a current range of 20-45 amps., 90 volts open circuit and as it is of the moving coil type the range is infinitely adjustable, *i.e.*, any current between the above minimum and maximum values can be obtained.

The transformer is suitable for connection to a 200/230 volt single phase supply or to two phases of a 400/440 three phase supply. It is primarily intended for sheet metal work, but it will also be found useful for tacking purposes. In short, here is a new high quality welding set for a wide range of light work.

*Compactness—only 12 in. × 11 in. × 22 in high*

*Current range 20-45 amps. Current infinitely adjustable*

*Class "B" insulation throughout Wide primary voltage range*

*Robust Construction*



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MUREX WELDING PROCESSES LIMITED, WALTHAM CROSS, HERTS.  
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IF IT'S METAL—  
IT NEEDS PAINTING  
WITH

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METAL PRESERVATIVE PAINT

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## The BUILDING EXHIBITION NOV. 14-28

# RENTOKIL WOODWORM & DRY ROT

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WOODWORM & DRY ROT CENTRE  
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LONDON.  
Tel.: LAMHAM 5455/6

RENTOKIL LTD., FETCHAM, LEATHERHEAD, SURREY  
Tel.: Leatherhead 4021/2

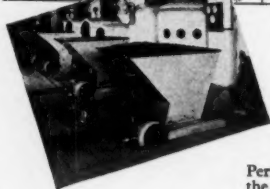
MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
100	100	100	100	100	100	100
80	80	80	80	80	80	80
60	60	60	60	60	60	60
40	40	40	40	40	40	40
20	20	20	20	20	20	20
0	0	0	0	0	0	0

OUTSIDE

### HEATING AND VENTILATION

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
100	100	100	100	100	100	100
80	80	80	80	80	80	80
60	60	60	60	60	60	60
40	40	40	40	40	40	40
20	20	20	20	20	20	20
0	0	0	0	0	0	0

INSIDE



### INSTALLATIONS

for the Modern  
Building

Perfect Comfort conditions in the Modern Building can only be maintained by the scientifically designed heating and ventilating installation. For the most up-to-date equipment—

Heating, Ventilating and Air Conditioning Engineers. Specialists in Oil, Gas and Automatic Firing.

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PLEASE SEND TRIAL TIN AS OFFERED.

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KURO

## THE COLLEGE OF ESTATE MANAGEMENT

St. Albans Grove, Kensington, W.8

Day and Evening Courses for the following Examinations: University of London Degree of B.Sc. (Estate Management), commence in October. (Day courses only.)

Applications by 31st May.

Royal Institution of Chartered Surveyors (Building, Quantities and Valuations sub-divisions), commence in April.

Applications by 31st December.

### Postal Courses

B.Sc. (Estate Management), commence in January and July. The Royal Institution of Chartered Surveyors, Institution of Municipal Engineers, Royal Sanitary Institute, commence in April and October. Town Planning Institute, commence in May and October.

Application forms to reach the College two complete calendar months prior to commencement of course.

Applications to The Secretary.

Telephone: Western 1546.

# KINNEAR

## PATENT STEEL ROLLING SHUTTERS

"Rolling Shutter" is a term indicative of class, not quality, but the word KINNEAR prefixed gives added significance and carries with it the assurance of superior service.

## ARTHUR L. GIBSON & CO. LTD.

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● Certainly the XPELAIR user pays a privileged price for fresh air.

● Air displacement guaranteed 14,000 cu. ft. per hour. Only 25 watts consumption.

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● Considered in terms of initial cost and running cost XPELAIR gives cheaper air movement than any other fan of similar type.

● Substantiated by National Physical Laboratory.

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### FLOOR AND ROOF SLABS

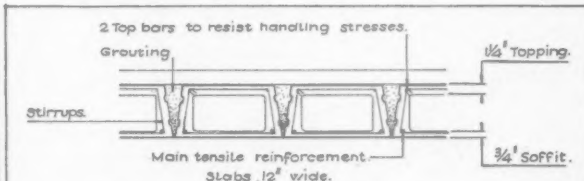
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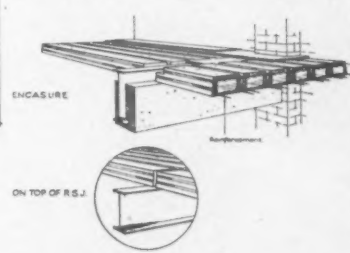


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TYPICAL SECTION THROUGH SLABS.

The "Beacon" Precast Floor and Roof Slabs have been used in the construction of various buildings on the Harlow Industrial Estate.



TYPICAL ILLUSTRATION.

The Advantages of this type of Construction are:—

- (a) Speedy Construction.
- (b) Strength with Lightness.
- (c) Resistance to Fire and Sound Transmission.
- (d) Absence of Shuttering.

● We welcome enquiries as to prices which will be found to compare very favourably with other forms of slab construction and would be pleased to assist in the preparation of schemes without any obligation whatsoever.



# OFFICIAL ANNOUNCEMENTS • CONTRACTS • TENDERS

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Close for press 1st post Monday for following Thursday Issue

## APPOINTMENTS

### TIMBER DEVELOPMENT ASSOCIATION, LTD.

**FURTHER advertisement**—Those who have already applied need not do so again as their application is being considered.

Applications are invited for the appointment of a **SENIOR STRUCTURAL ENGINEERING ASSISTANT** in the Research and Design Department of the Association. Applicants should be Corporate Members of the Institution of Civil Engineers and/or the Institution of Structural Engineers, who have had at least three years' practical design experience of framed structures.

The successful candidate will be engaged upon the advancement of timber structural design technique. Previous design experience in timber is desirable, but not essential. Commencing salary: £650 per annum.

The successful candidate will be required to join the Staff Superannuation Scheme if invited to do so.

Applications stating age, qualifications and experience should be addressed to The Director, Timber Development Association, Ltd., 21, College Hill, E.C.4, by the 5th December, 1951. [5934]

### LONDON COUNTY COUNCIL.

#### HOUSING AND VALUATION DEPARTMENT.

**APPLICATIONS** invited for:—

(a) **BUILDING SURVEYOR**—£700, rising to £840 a year (basic)—must be thoroughly experienced in maintenance and repair of large properties, including preparation of specifications and estimates for maintenance. Preference for candidate with recognised professional qualification.

(b) **BUILDING SURVEYOR**—max. £700 (basic)—must have extensive experience of preparation of specifications and estimating for repairs.

Basic salaries subject to addition of 10% up to £600 and 7½% on remainder. Superannuable. Application forms (BS/58) from Director of Housing and Valuer, County Hall, S.E.1 (enclosing stamped addressed envelope). (1326) [5954]

**APPLICATIONS** are invited for the post of **ASSISTANT GOVERNMENT TOWN PLANNER (Temporary)** in the Department of Town & Country Planning, Ceylon, on the scale of £1,050-£50-£1,250 per annum.

Further particulars and forms of application may be obtained from the office of the High Commissioner for Ceylon in the United Kingdom, 13, Hyde Park Gardens, London, W.2.

Applications for the above post should reach the High Commissioner for Ceylon in the United Kingdom on or before 21 days from the date of publication of this notice. [5951]

### CITY OF NORWICH.

#### CITY ENGINEER'S DEPARTMENT.

##### TOWN PLANNING SECTION.

**APPLICATIONS** are invited for the appointment of a **TOWN PLANNING ASSISTANT** in Grade VII of the A.P.T. Division.

Applicants should be Associate Members of the Town Planning Institute and must have a sound knowledge of town planning and practical experience of development control and in the preparation and administering of planning schemes. Applicants should give full particulars of their training, qualifications and experience, and should state their age, present and previous positions, giving salaries and dates, and enclose copies of three testimonials.

The appointment is terminable by one month's notice on either side and subject to the provisions of the Local Government Superannuation Act, 1937. The successful candidate therefore will be required to pass a medical examination. Relationship of applicant to members of the Council or staff must be declared in the application. Canvassing, directly or indirectly, will be a disqualification.

Applications should be delivered to the City Engineer, City Hall, Norwich, not later than 10 a.m. on Monday, 10th December, 1951, endorsed "Town Planning Assistant, A.P.T. VII."

H. C. ROWLEY, M.I.C.E.,  
City Engineer.

City Hall, Norwich.  
13th November, 1951. [5959]

## APPOINTMENTS—contd.

### SINGAPORE IMPROVEMENT TRUST.

#### ASSISTANT PLANNING OFFICER.

**AN ASSISTANT PLANNING OFFICER** is required by the Singapore Improvement Trust, appointment in the first instance being on a three-year Agreement. Age preferably under 30 years.

2. Candidates must be qualified Architects and members of the R.I.B.A. Experience in a statutory planning office or a housing department of a local authority is an advantage but not a necessity. A planning qualification is not essential but the officer should be prepared to study for the examinations of the I.P.I.

3. Salary Scale \$500-\$1,000 per month, the point of entry depending on the age, qualifications and experience of the appointee. Expatriation allowance \$110-\$190 per month, according to basic salary. Cost of Living Allowance 95 per cent of the first \$200 p.m. of basic salary plus (i) Single Officers, 40 per cent of next \$100 and 25 per cent of next \$400 of basic salary (max. allice. \$330 p.m.); (ii) Married Officers (no children), 55 per cent of next \$200 and 45 per cent of next \$300 of basic salary (max. allice. \$435 p.m.); (iii) Married Officers (with children), 75 per cent of next \$400 and 65 per cent of next \$100 of basic salary (max. allice. \$555 p.m.). All allowance will be paid to cover cost of duty transport. All allowances are subject to revision. \$1 (Malayan) equals 2s 4d. For example a married officer (with children) on a basic salary of \$590 p.m. would draw equivalent of £1,655 10s per annum, including present allowances.

4. Strict medical examination.

5. Provident Fund to which the appointee must contribute 7½ per cent of basic salary; the Trust contributes a minimum of 7½ per cent rising by stages to 20 per cent after 20 years' service.

6. Leave and passages in accordance with Regulations.

7. Quarters (with heavy furniture) are provided at a rental of 8 per cent of salary, or a housing allowance (12½ per cent of salary) paid in lieu.

8. Applications in duplicate, with full personal and technical information and copies of three recent testimonials (also in duplicate) to Messrs. Peirce & Williams (Agents to the Trust), 1, Victoria Street, London, S.W.1, before Friday, 21st December, 1951. [5963]

### BEDLINGTONSHIRE URBAN DISTRICT COUNCIL.

#### APPOINTMENT OF TECHNICAL ASSISTANTS.

**APPLICATIONS** are invited for the under-mentioned established appointments in the Engineer and Surveyor's Department in connection with the Council's housing programme.

(a) **ONE ENGINEERING ASSISTANT** (Grade A.P.T. III).

(b) **ONE ARCHITECTURAL ASSISTANT** (Grade A.P.T. IV).

Applications stating age, qualifications and experience with copies of not more than three recent testimonials should be sent to the undersigned not later than 30th November, 1951.

F. S. FORSTER,

Clerk to the District Council.  
Council Office,  
Bedlington.

14th November, 1951. [5961]

### BOROUGH OF WALTHAMSTOW.

#### BOROUGH ARCHITECT'S DEPARTMENT.

##### ASSISTANT ARCHITECT.

**APPLICATIONS** are invited for an **ASSISTANT ARCHITECT** (Grades I/V—£440/£620 plus London Weighting), commencing salary according to qualifications and experience.

Applications with names of two persons for references should be received by the undersigned not later than 5th December, 1951.

G. A. BLAKELEY,  
Town Clerk.

Town Hall,  
Walthamstow, E.17. [5964]

## APPOINTMENTS—contd.

### LONDON COUNTY COUNCIL.

**ARCHITECTURAL ASSISTANTS** required for preparation of working drawings for housing schemes (cottages and multi-storey flats) in Housing Architect's division of Housing and Valuation Department. Salaries up to £380 plus 12 per cent according to qualifications and experience. Superannuable. Apply Director of Housing and Valuer, County Hall, S.E.1, quoting AA/56. Stamped addressed envelope required. (1250.) [5889]

## MINISTRY OF WORKS.

**THERE** are vacancies in the Chief Architect's Division for **ARCHITECTURAL ASSISTANTS** and **LEADING ARCHITECTURAL ASSISTANTS** with recognised training and fair experience. Successful candidates will be employed in London and elsewhere on a wide variety of Public Buildings, including Atomic Energy and other Research Establishments.

Salary: Architectural Assistants £340-£575 per annum. Leading Architectural Assistants £570-£675 per annum. Starting pay will be assessed according to age, qualifications and experience. These rates are for London; a small deduction is made in the Provinces.

Although these are not established posts, many of them have long term possibilities and competitions are held periodically to fill established vacancies.

Apply in writing, stating age, nationality, full details of experience and locality preferred, to Chief Architect, Ministry of Works, Abell House, John Islip Street, London, S.W.1, quoting reference WG10/BS. [5763]

## CONTRACTS

### BOROUGH OF MACCLESFIELD.

**SCHEME 7A—ERECTION OF SIX AGED-PERSONS' DWELLINGS, IN BLOCKS OF TWO, AT HURDSFIELD, MACCLESFIELD.**

**TENDERS** are invited for the erection of **SIX AGED-PERSONS' DWELLINGS, in blocks of two, at Hursfield, Macclesfield.**

Bills of Quantities and Form of Tender may be obtained from the Office of the Borough Architect, 3, Jordongate, Macclesfield, on payment of a deposit of £2 2s, which will be refunded on receipt of a bona fide tender, or the return of all documents, unmarked, within seven days of their receipt by the depositor.

Tenders, in plain sealed envelopes (which will be provided) are to be delivered to the Office of the undersigned not later than 10 a.m. on Wednesday, 12th December, 1951. The Corporation does not undertake to accept the lowest or any tender.

WALTER ISAAC,  
Town Clerk.

Town Hall,  
Macclesfield.  
15th November, 1951. [5962]

## AUCTION SALE

### FREE OF DEVELOPMENT CHARGE.

#### HORLEY, SURREY.

##### FREEHOLD RESIDENTIAL LAND

Ripe for Immediate Development.

APPROX. 4½ ACRES.

Frontages to Made-up Roads.

#### LEOPOLD FARMER & SONS

will offer the above to **AUCTION AT THE LONDON AUCTION MART, 155, QUEEN VICTORIA STREET, LONDON, E.C.4, ON TUESDAY, 11th DECEMBER, 1951.**

Particulars, Plan and Conditions of Sale from Leopold Farmer & Sons, Auctioneers & Valuers, 46, Gresham Street, London, E.C.2. Tele.: MONarch 3422. [5962]



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RATE: 1/6d. per line, minimum 3/-, average line 6 words. Each paragraph charged separately. Semi-displayed 25/- per inch. BOX NOS. add 2 words plus 1/- for registration and forwarding replies.

PRESS DAY Monday. Remittances payable to Iliffe & Sons Ltd., Dorset House, Stamford Street, London, S.E.1.

No responsibility accepted for errors.

## ARCHITECTURAL APPOINTMENTS VACANT

N.A.A.F.I. requires qualified assistant for Architects' Section at H.Q. Claygate. A sound knowledge of design and experience in structural detailing essential for a variety of interesting work. Reply in first instance, in writing, giving details and salary, required to: Director of Works and Buildings, N.A.A.F.I., Esher, Surrey. [5965]

ASSISTANTS required in Architect's Department of large East Midland industrial concern for varied and interesting work in connection with extensive works development programme. Applicants should have initiative in designing and be capable of preparing full working drawings from architect's sketch plans.—Junior and Senior assistants are required and applicants should reply, giving details of age, experience and salary required, to Box 4893. [5884]

IMPERIAL CHEMICAL INDUSTRIES, Ltd., General Chemicals Division, require one or two assistant architects in the Architectural Section of their Chief Engineer's Department, Runcorn. Applicants should have had good experience in design and the preparation of working drawings. Other factors being equal, preference will be given to those who have passed the final examination of the R.I.B.A. Salary dependent on age and experience. Membership of Pension Fund.—Apply in writing, quoting E/81, to Staff Manager, Imperial Chemical Industries, Ltd., General Chemicals Division, Cunard Building, Liverpool, 3. [5893]

## SITUATIONS VACANT

STRUCTURAL draughtsman required for Leamington Spa area, experience in design of industrial buildings and alterations necessary, knowledge of building work would be an advantage.—Copies of testimonials and salary required in Box 3013. [0111]

MEASURER required for Estimating Department in firm of Reinforced Concrete Engineers in London Office. Also vacancy for Junior Measurer.—Write stating age, qualifications and salary required to Box A.N.565, at 191, Gresham House, E.C.2. [5929]

ENGINEER/AGENT required for large B. & C.B. Contract in Southern England.—Applicants of the highest ability only need apply and must produce references from well known firms for which they have worked. Salary, etc., to be discussed at interview.—Write Box 810, c/o Geo. Murray (Adv.), Ltd., 184, Strand, London, W.C.2. [5911]

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MODELS, architectural and industrial.—Inquire first of British Industrial Model Services, Ltd., Regent Chambers, Westover Rd., Bournemouth. [5724]

ARCHITECTURAL Models, coloured perspectives, layouts, interiors and sketch plans. Quotations by return.—Turner, 3, George Street, Croydon 2930. [5909]

## CONTRACTS WANTED

G. H. THOMPSON & CO., Building Contractors, 30, Thorndean Street, London, S.W.18. Phone: Wim. 0070.

CONTRACTS WANTED.

PLUMBING & Heating Contracts required. Lead Burning & Pipe Welding Specialists.—W. & S., 31, Sherbrooke Rd., London, S.W.6. Fulham 3904 after 4.15 p.m. [5944]

## CONTRACTS WANTED—contd.

JOINTLESS COMPOSITION FLOORING in attractive colour range.—Quotations free. Full particulars from the LIOTEX ASBESTOS FLOORING CO. LTD., 10-29, Jarrow Road, London, S.E.16. Bermondsey 4341-2-3. [5931]

CONSULT US for YOUR EXCAVATION and HAULAGE. Keen prices quoted. We have modern Excavators, Bulldozers, and a large fleet of 6-tyd. Steel-bodied Vulcan Tipper.

Apply LAMBRICK CONTRACTORS, LTD., Feltham Road, Ashford, Mdx. Ashford, Mdx. 3691. [5955]

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SLEEPERS in all GRADES—Chaired, Relayable, and Roadway SHUTTERING, POSTS and BOARDS for temporary enclosures always in stock.

TILLEY'S (WOLVERTON), LTD., Wolverton, Bucks. [5915]

R.S.J., Angle and T-Iron available for immediate delivery.—Jasco, Ltd., 246, Bethnal Green Rd., E.2. Bishopsgate 9434. [5923]

PLAN Chests, dble. elephant antiquarian, 3 & 4 drawers, 5ft Folding Tables, Office Desks.—Cole Bros., 49, Newington Causeway, London, S.E.1. [5957]

ALL Mouldings, Plain and Embossed, and Embossed ornaments. Numerous designs.—Dare's Moulding Mills, Ltd., 60, Fowndall Rd., Dalton, E.8. [0086]

ADVERTISERS offer Creosote or Tar, 40 gallon, A 1/5 per gallon. Quick drying Red Paint and Black Varnish, 5 galls. 30/-. Plasterers' Hair, 1/- per lb. All carriage paid.—Bird's, Duxford, Cambs. [5953]

PLYWOOD—4mm. nom. Resin-bonded Oak-faced Plywood, 72in. x 36in./42in./48in., or cut to size. Immediate delivery ex stock.—Send for details to N. GERVER, 10, Mare Street, London, E.8. Phone: AMH. 5806. [5926]

PLUSH DOORS.—Free of Licence, 6ft. 6in. x 2ft. 6in. x 1 1/2in. (Gerwood brand). Also 100,000ft. of super 1 1/2in. FINNISH LION HARDWOOD, in all sizes at controlled prices.—Write now for free list to N. GERVER, 10, Mare Street, Hackney, London, E.8. Telephone: Amhurst 5805. [5925]

## PLANT FOR SALE

SMITH'S 2-ton overhead travelling crane, 31ft 6in span, 400/3/50.—G. Eltherington & Co., 69, Lumb Lane, Roberttown, Liversedge, Yorks. Tel.: Heckmondwike 1. [5960]

BELLMAN'S for STEEL ERECTION: SUPPLY of HANGARS, LARGE SHEDS, etc.; HIRE of LATTICE STEEL ERECTION MASTS (30ft. to 160ft.).—Write Terminal House, S.W.1. Phone: Sloane 5259. [5921]

CATERPILLAR D.2 and D.4 Tractors, little used and in excellent condition, available for immediate supply from stock with or without equipments.—Evans of Leeds, Waterloo Lane, Bramley, Yorks. Telephone Pudsey 4005. [5950]

CONCRETE TILE WORKS EQUIPMENT to CLEAR REGARDLESS OF COST: Brosley Automatic Machine, Rope Conveyor, Racking 50,000 Tiles, Electric Motors, Two Hand Interlocking Machines and Pallets, Hand Brosley Machine for Raftes and Gables, Dipping Cradles, Diesel Oil Tank, Anglo-Scottish Spares, Electric Space Heaters, Electric Welding Plant, Electric Switchgear, Quarry Tile Machine, B.S.S. Leak Test, B.S.S. Transverse Testing Machine, Black Topping Colour.—CORNELLY TILE CO., LTD., 25, The Esplanade, Forthcawl. [5958]

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MODERN PLANT FOR HIRE WITH SERVICE: 4 cu. yd. Priestman Wolf EXCAVATOR, with Trencher and Skimmer.

T.D.9 TRACTORS, with Angledozer and/or 4

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Chainside SHOVELS, Diesel.

COMPRESSORS—2-Tool Mobile.

Mixer-Hill 10B, Hi-Way DUMPERS.

CONCRETE MIXERS, ROAD FORMS, SCAF.

FOLDING.

HUBERT C. LEACH, LTD., 261, High Street, Waltham Cross, Herts. Waltham Cross 3256-7-8. [5916]

## WANTED

LARGE quantity Steel Sheet Piling urgently required, preferably 1GB, No. 2 or No. 3 section.—Dudley Vale, Limited, 3, Buckingham Place, London, S.W.1. VICtoria 0252. [5956]

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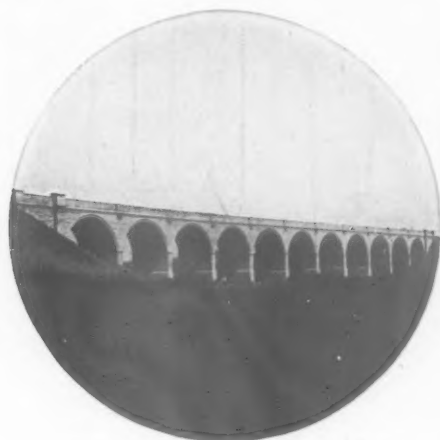
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